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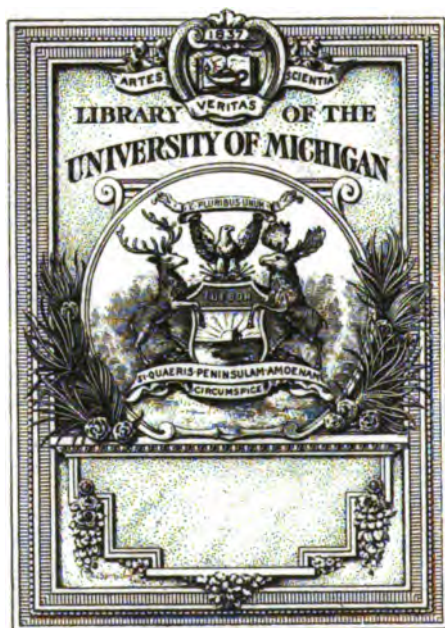
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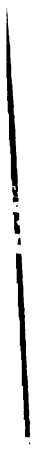


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I. JOHN KINGSBURY, AND THE YOUNG LADIES' HIGH SCHOOL.

PROVIDENCE, R. I.

On the fifth day of February, 1858, Mr. John Kingsbury withdrew from the charge of the "Young Ladies' High School," in Providence, established by him in 1828, and over which he had presided with signal success for precisely thirty years. The occasion, as was most fitting, was celebrated by a reunion of his pupils, both past and present, who assembled in the Chapel of Brown University, which was offered for the purpose by the corporation. Of the interesting exercises which marked that occasion, we subjoin an account, and at the same time, we gladly seize the opportunity to present a brief outline of Mr. Kingsbury's career, not only as a teacher, but also as a citizen, and a man, in the community where he has so long resided.

JOHN KINGSBURY was born at South Coventry, Connecticut, May 26th, 1801. His father was a farmer in moderate circumstances, and the son was trained to agricultural labor, and worked on the paternal farm till he was twenty years of age. The education by which his boyhood was instructed and trained, was such as he could obtain by attending, during the winter months, the district school of his native town, till he was fifteen years of age, and then by becoming himself a teacher for four successive winters, in the same or in a neighboring town. In September, 1822, having now attained his majority, he entered Brown University, after such preparation in classical studies, as he was able to make during a brief period, under the instructions of Rev. Chauncey Booth, a worthy minister, at that time settled in South Coventry. The expenses of his college residence for four years, he was obliged to defray almost entirely by his own exertions, and this made it necessary that he should continue the practice of teaching during a part of each year, as he had done before entering college. He, however, allowed nothing to repress his aspirations or diminish his industry as a student, and at the college commencement in 1826, he graduated with the second honors in a class, which numbered in its lists, with other distinguished names, those of George Burgess, now the bishop of the Episcopal church in Maine, and Edwards A. Park, the eminent Professor of Christian Theology at Andover.

A few months before graduating, he had become associated with the late Mr. G. A. Dewitt, in the management of what was then the

leading school in Providence, which had been established by that gentleman. He continued in this association with Mr. Dewitt, for nearly two years, when he commenced the "Young Ladies' High School," first as a department of the school with which he had before been connected, and afterwards as a separate and independent institution. It was commenced at the outset, as it has been always continued, purely as a private enterprise, with no patronage and with no guarantees of support, save such as might be found in its own intrinsic merits and claims on the public estimation. But the history of the school, and the exposition of the principles by which it was managed, we leave to be given by its founder himself in the address which he delivered to his assembled pupils on the occasion to which we have referred, while we briefly sketch the other useful services with which his life has been filled.

Though he had embarked thus early after leaving college, in an enterprise which was destined to depend for its success almost entirely on his own unassisted labors, he was yet not unmindful of the duties which an educated man, whatever may be his calling, owes to the community in which he lives. The interests of general education, and of philanthropy and religion, early enlisted his active exertions, and we only record what we know to be the general verdict of his fellow citizens in Providence, when we say that few persons in that city, within the past thirty years, have rendered so eminent services to all these high interests of his fellow men. He united himself with the Richmond Street Congregational Church in Providence, and there became a teacher in the Sunday School at a period when such places of instruction were comparatively in their infancy. He also became a member of the Providence Franklin Society—an association for the study of science, especially of the sciences of nature, and was for many years its Secretary, and afterwards the keeper of its cabinet, and its President.

The pupils whom he instructed in his school, belonged, for the most part, to the more affluent and cultivated classes of society, and the fidelity and care which his daily life as an instructor, constantly exemplified, inspired to an unusual degree the confidence of the community. A multitude of those labors of various kinds, which in every considerable town, demand education and skill, executive ability and a knowledge of public opinion, were thus constantly devolved upon him. Many of these, he was, of course, compelled to decline; but there were very many others which he performed with signal advantage to the several interests—whether religious, social, or scientific—to which they pertained. He thus, to a degree that is seldom

which had been established by that general association with Mr. Dewitt, for nearly the "Young Ladies' High School," a school with which he had before been a separate and independent institution. As it has been always continued, with no patronage and with no guarantee, might be found in its own intrinsic estimation. But the history of the principles by which it was managed, under himself in the address which he has on the occasion to which we have the other useful services with which

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reached in the secluded and laborious profession of a teacher, identified with most of the higher interests and institutions of the city in which his lot was cast.

But in addition to all these comparatively private labors, have often come to him in large proportion, he has also long distinguished by his activity and good services in behalf of wider agencies of beneficence which extend beyond the community in which he lives. In the year 1830, the American Institute of Instruction was established—that well known Association of American Teachers, whose influence has contributed so largely to the elevation and improvement of our national education. Mr. Kingsbury was among its original founders, and has always been one of its most active and efficient officers. From 1830 to 1837 he was a member of its Board, from 1837 to 1855, he was one of its Vice-Presidents. In 1855 was chosen President, and presided at its annual meeting in 1856 and 1857, when he declined a re-election, and again accepted the subordinate post of Vice-President.

In 1845, soon after the reorganization of the public schools of Rhode Island, the Rhode Island Institute of Instruction was formed, for the purpose of elevating the professional character of teachers, and of securing the coöperation of all classes of the community in carrying into effect the system of public instruction which had then just been commenced in that State. In the Association, Mr. Kingsbury, though at the head of a private school, whose interests were wholly aloof from the system in question, was one of the earliest originators, and held the office of President from 1845 to 1856, a period, during which it accomplished very important results in behalf of the public education of that State. The aim of this Association was to remove prejudices, to diffuse information respecting common schools, and also to secure a general coöperation in their behalf. In promoting these several objects, as well as in raising among the friends of education, the funds which were required for the purpose, the greater part of the labor was always performed by the President. In resigning the office of Commissioner of Public Schools in 1849, Mr. Barnard expressed his obligations to the valuable coöperation he had received from the Institute, and particularly from the gentleman who had presided over it from its first organization: "To the uniform personal kindness of Mr. Kingsbury, to his sound, practical judgment in all matters relating to school education, to his prompt business habits, to his large spirit, to his punctual attendance, and valuable addresses in every meeting of the Institute which has been held out of the city, and to the pecuniary

which his high character and influence in this community has enabled him to extend to the various plans which have been adopted by this department, he desired to bear this public testimony, and to make his grateful acknowledgements, both personal and official."

Nor have his public sympathies been by any means restricted to the interests with which he has always had a professional connection. In November, 1839, having long been connected with the Sunday School of the church to which he was attached, he commenced a Bible class for young men, as a branch of that school. That Bible class he has continued, uninterrupted by the other labors of his life, to the present time,—a period of nearly nineteen years, during which he has taught the lessons of the Bible to about four hundred young men who have been members of the class, and among them have been more than one hundred and fifty students of the University at which he received his education. In this connection, we may also mention that when, in 1851, a portion of the church with which he was connected decided to form a new religious society, and erect a house of worship near their own places of residence, Mr. Kingsbury was placed at the head of the movement, and it was by his personal efforts that the greater part of the subscriptions was obtained, by which that important enterprise was accomplished, and the Central Congregational Church successfully established. A similar service he had already performed in behalf of the Young Men's Bible Society, of which he was for many years the President, and at two different periods, he provided the means and superintended the agency for supplying every destitute family in the State with the Word of God. He has also been, for nearly eight years, a corporate member of the American Board of Commissioners for Foreign Missions, and is at the present time a Trustee of the Butler Hospital for the Insane,—an institution which always makes no inconsiderable demand on the time and services of those who are charged with its management.

In 1844, Mr. Kingsbury was chosen a member of the Board of Trustees of Brown University, and immediately became one of its active managers and guardians. In 1850, when a subscription to the amount of \$125,000 was raised for its more complete endowment, he was placed upon the committee to whom the work was intrusted, and it was to his faithful and experienced services that the success of this enterprise was in no small degree to be ascribed. In 1853, he was raised to the Board of Fellows of the University, and at the same time was chosen Secretary of the corporation; and in these offices he still continues to labor for the promotion of the interests of this venerable seat of learning. In token of the estimation in which his pub-

lic services are held at the University, he received from its Fellows, in 1856, the honorary degree of Doctor of Laws.

It has often been said that a professional man is always a debtor to his profession, and the sketch which we have given, shows in what manner the gentleman to whom it relates has acknowledged and paid this debt to his profession. He might have done it by the publication of text-books or by contributions to the science or the learning of the teacher's calling, or by smoothing the professional pathway of others, by the lessons of his own experience and endeavors. He has, however, chosen another mode, and has paid the debt due to his profession by giving to it his most assiduous and life-long devotion; and still more by linking his untiring labors with every beneficent agency and institution in the community to which he belongs. He has in this manner, done his part to exalt the profession of a teacher, and to illustrate its native affinities for whatever is pure and useful and of good report among men.

But the period of thirty years during which he had presided over the school which he founded, was now drawing to a close, and he had long been instructing the daughters of those who were his earlier pupils. It was the period to which he had always designed to restrict his active labors as an instructor, and he took the necessary steps to provide a successor* in the post which he had created, as well as occupied for so many years. No sooner, however, was it known that he was about to liberate himself from the daily toils and cares of his profession, than he was solicited by the friends of education in Rhode Island, to accept the office of Commissioner of Public Instruction, then just made vacant by the resignation of Rev. Robert Allyn. Before he had been able, entirely, to close his labors as a teacher, he received from the governor of the State, a commission for the office in question. Upon the duties of that office he entered in October 1857, bringing to them qualifications, such as a mature experience in the practical details of education, and a large acquaintance with its broadest and most comprehensive interests cannot fail to bestow.

We have thus hastily sketched an outline of the course of professional fidelity and success, and of public service and usefulness, which Mr. Kingsbury has, for thirty years, quietly and unostentatiously pursued in the community with which he has been identified. We now turn from the instructor to the school, and especially to the interesting occasion which closed his connection with it on the morning of the fifth day of February, 1858. The account of the exercises, for the greater part, we have taken from the reports that appeared in the Providence Journal.

* Mr. Amos Perry.

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REUNION OF THE YOUNG LADIES' HIGH SCHOOL, FEBRUARY 5TH, 1858.

It was to celebrate this retirement of Mr. Kingsbury from the charge of the school, that the ladies' both matrons and maidens—who had been his pupils, assembled on that day, with their friends, in the Chapel of the University.

The occasion, though private in its nature, brought together a considerable company of the leading citizens of Providence, among whom we may mention the Governor of the State, the Mayor of the City, the President and several of the Professors of the University, and several clergymen of different denominations. President Wayland occupied the chair, and Rev. Dr. Swain commenced the exercises with a prayer, after which the following lines, written by a recent member of the school, were sung by the assembly to the tune of Old Hundred:

"A grateful band we come to-day,
Within these sacred walls to pay
A parting tribute to our guide,
Who led our steps to wisdom's tide.

Here are the friends we loved of yore,
With whom we studied earthly lore;
Who trod with us the paths of truth,
In those light hearted days of youth.

Gone from us now those sunny hours,
Vanished like dew drops from the flowers;
Passed like the mist from off the hill,
Yet memory fond recalls them still.

Within a generation's span,
The union ends which then began;
Above, in heaven, oh, may there be,
A union for eternity."

Dr. Wayland then arose, and after a brief explanation of the origin and import of the scene before him, made in substance the following address:

This occasion sufficiently explains itself, yet I cannot refrain from offering a few additional words by way of personal testimony. To me this gathering possesses a peculiar interest, for I have known this institution from its commencement, and have observed its progress to the present hour. It arose, as the sun frequently arises on the morning of a most brilliant day, amidst clouds and mist. The greater part of our citizens at that time looked at the attempt as very public spirited, but very chimerical. Our population was but about one-third of its present number. It was seen that such schools as we needed could be sustained in Boston, New York and Philadelphia, but very few believed that we could sustain one in Providence. Mr. Kingsbury thought differently. He knew us better than we knew ourselves. He commenced his school in the full belief that any thing which deserves success, is as sure to succeed in

Providence as anywhere in New England. The result justified his anticipations. His school was immediately filled, and for thirty years without any solicitation, without even an advertisement, it has always been full to overflowing. At many times the applicants waiting for admission were numerous enough to have established another such school. And this much has been achieved without pandering, for a moment, to the ephemeral fancies of the day, without an effort to please men or women, mothers or daughters, except by the faithful, able and impartial discharge of every duty. Mr. Kingsbury determined to have a ladies' school which should be an honor to Providence, or he would have none at all. He has realized his idea, and the results are spread before the world. There is hardly a family amongst us, which, in some of its branches, does not acknowledge with gratitude the benefit of his instructions and personal influence. You can hardly collect a company of intelligent young ladies in any part of this city, without finding that a large portion of them, I was going to say the most intelligent portion of them, were the pupils of this school. But its influence has not ended here. From almost every portion of our country, young ladies have resorted hither for instruction, and of those who were to the manor born, a large number have been allured away from us to become stars of the first magnitude in almost every city in the land. The mother of the Gracchi pointed to her sons as her jewels; but I know no man among us who is so rich in this sort of jewelry as Mr. Kingsbury. Five hundred of his pupils look upon him with gratitude and veneration, and at this very moment are returning thanks to the man whose whole life has been so successfully devoted to labors for their intellectual and moral improvement.

But I may not stop here. Though you, ladies, have had so much, you have not had all of John Kingsbury. While he has thus labored for you, there has hardly been a benevolent effort undertaken in this city, which has not felt the benefit of his wise and disinterested efficiency. Whether a university was to be endowed, or a church to be established, or an association to be lifted out of difficulties, or a society of young men to be aided and directed in their labors to promote the cause of Christ, John Kingsbury was the man to do it; and now before you had fairly let him go, the State has seized upon him, to carry forward the cause of education, and raise the schools of Rhode Island to a point of eminence not yet attained by any similar institutions in our land. *Nihil tetigit quod non ornavit—quod non edificavit.* Such has been and is your honored instructor, and we come here to unite with you to-day to testify to the appreciation in which he is held by all good men in the city of Providence.

Mr. Kingsbury, being called upon by President Wayland, to give an account of the school, then narrated its history, and stated the principles on which it had been conducted, in the following interesting address:

The task which I now assume, in giving the history of a school that has rested entirely on a single individual, and that individual myself, is one of extreme difficulty. The "*quorum pars magna fui*," must be too prominent not to expose me to censure. Yet relying on your kindness,

I know of no other way but to proceed and use that little, but offensive word, which may subject me to the charge of egotism.

Just thirty-two years ago, I was sitting one evening in yonder college building, preparing for a morning recitation. A rap at the door, was followed by the entrance of a gentleman then well known in this community, and still held in grateful remembrance by all who know how much he did to give a healthful impulse to the cause of popular education in this city. That gentleman was the late Mr. G. A. Dewitt. He came to propose that I should become an associate principal with him in the instruction of the Providence High School—an institution which he had organized and which shared largely in the esteem of the public. The proposition was accepted; and on the first day of April 1826, just five months before I was graduated at Brown University, I entered upon the duties of this engagement. In this school, which was conducted on the monitorial system and which became very large, I remained nearly two years. During this period numerous intimations were made to me that a smaller and more select school for young ladies, was very much needed. Propositions were made to me to commence such an one. But as a separate school could not be established, without injuring the gentleman with whom I was associated, it was decided to make a separate department in the High School exclusively for young ladies, and hence the name "Young Ladies' High School." This name, it should be remembered, was not then used to designate the highest grade of Public Schools. Such was the origin of the school, whose thirtieth anniversary we celebrate to-day.

In the circular which was printed to announce the opening of this department of the High School—the only advertisement of any kind ever sent forth to secure public attention—the following language was used to express the leading idea: "Our object in the establishment of this department, is, to afford young ladies such facilities for education, that they will be under less necessity of spending abroad the most important period of their lives; a period in which a mother's judicious care is so necessary to the formation of character. In this undertaking, we look for support only among those, who wish their daughters to acquire a thorough education. No attempt will be made to gain the approbation of such as would prefer showy and superficial accomplishments, to a well regulated mind."

It is hardly necessary to add that the enterprise was regarded as somewhat chimerical, and that many were ready to predict that it would end in failure. How well it has succeeded, it is not for me to say. It is quite certain, that whatever measure of success may seem to others to have been secured, my own expectations and hopes have never been realized. No one knows so well as myself, what have been the defects of the school. Indeed every successive day has caused them to be more clearly revealed to me. Yet in justice to myself, I may say that I have struggled constantly to remedy these deficiencies; and so far as they have remained to this hour, it has been owing rather to the want of ability on my part, than to the want of an intense desire to remove them. I am happy to believe that it is the just appreciation of this desire and effort to make a

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good school, which has resulted in the continued favor of this community to the present time.

The number of scholars was at first limited to thirty-six; but the accommodations allowing it, the number was soon increased to forty. Three more were added after the erection of the present building, and forty-three has been the fixed number ever since. No pressure of circumstances has ever induced me to add a single one beyond the prescribed number, except when by some mistake or misapprehension a member of the school was upon the point of being excluded. In such a case, the individual has been received as a supernumerary and gratuitous scholar. At the end of six months, the complement of scholars was full. Since this period, there has always been a list of applications in advance of the full number, varying from twenty to sixty. When I decided to bring my connection with the school to a close, there were *thirty-two* names on this list. The admissions for the whole period have been *five hundred and fifty-seven*. Eighty of these have died, of whom forty were married. Two hundred and eighty-two have been married; consequently two hundred and seventy-five remain single. It should be added, however, to prevent mistake, that a large part of these have scarcely yet reached a mature age. Eighty-one of the whole number have been named Mary, sixty-one Sarah or Sally, and fifty-one Elizabeth or Eliza.

For the last ten years I have been instructing the second generation. No circumstance is more grateful to me than the fact that almost every individual of this class, old enough and sufficiently near to attend school, has become or has sought to become a member of the school. By no persons has there been more regret expressed at my withdrawal from the office of instructor, than by my former scholars who wish to commit their daughters to my care.

To those who are familiar with public sentiment in regard to education now, but who know—except as a matter of history—little of the change which has taken place during the last thirty years, the establishment and successful operation of a school like this, may seem a very small affair. Could we, however, place them at the beginning of this series of years and with them trace all the circumstances adverse to success, it would be much easier to make that impression which is so necessary to a perfect understanding of the subject. Allow me to give two or three illustrations for this purpose. At that period the range of studies in female education was very limited in comparison with that of the present. In addition to the elementary branches, a little of History, a smattering of French, and a few lessons in painting or embroidery, were thought to be sufficient for the education of girls. The study of the Latin Language, of Algebra, of Geometry, and of the higher English branches, was introduced into few schools out of the city of Boston, and it was thought visionary to attempt the study of them here. In fact it was hardly possible to escape ridicule in making the experiment. Even the boys in the street were sometimes heard to say in derision, "there goes the man who is teaching the girls to learn Latin." I need not say how great a change

has taken place in this respect. What was then thought to be extravagant and visionary is now a very common-place matter, and an approved and established fact.

The subject of vacations will furnish another illustration. Thirty years ago, the public schools were allowed the Friday after each quarterly examination. Thus the enormous amount of just four days in the year, in addition to the Fourth of July and Thanksgiving, was allowed for vacation. Private schools generally had no vacation at all. Such was the state of public opinion that in the organization of this school, it was not deemed politic to take more than four weeks vacation at first, and this was thought by some persons to be an unwarrantable liberty. The same public opinion will not now be satisfied with less than eight weeks vacation even in public schools.

The terms for tuition in private schools will furnish still another illustration. Thirty years ago the price of tuition in the highest classical school in this city, was five dollars a quarter. I had the temerity to charge twelve and a half dollars for the same time, or fifty dollars a year; and what is most marvellous, teachers were the most offended at the innovation. They did not perceive that if the experiment proved successful, it would be a benefit to them; and if unsuccessful it could do them no harm. Accordingly the teacher who felt himself most aggrieved by the extravagant price of tuition, could at the end of two years have as many scholars at ten dollars a quarter as he had previously taught at half that sum; and thus was so much injured that his income was doubled. I have never tried to avoid injuring teachers in this way.

It may be proper here to speak of the school-room and furniture. At the outset, it was deemed important to arrange and furnish the school-room in such a manner that the transition from well furnished homes to the place of study, should not present the wretched contrast which had been too common previous to that period. Frequently, a room set aside as unfit even for trade or for mechanical purposes, was selected and fitted up in the cheapest manner, as the place where the daughters of our richest and most respectable people were to be instructed. Therefore, in order to avoid this mistake, a building, which stood where the present one now stands, and which had been used as a school-room by the venerable Oliver Angell of this city, was procured, and entirely refitted for the purpose. The old desks and seats were removed, the walls were neatly papered, the whole floor was carpeted—a luxury until then unknown in this country so far as I have been able to learn—and the room was furnished with desks covered with broadcloth, and with chairs instead of stiff backed seats. Some very excellent people lifted up their hands in astonishment, and said that it was a pity to have so much money wasted! That this furniture would need to be renewed so often that the expense could not be sustained! The novelty of such a school-room attracted many visitors, not only from this city but from abroad. One gentleman from Kentucky, being in Hartford, came here solely to see it; and it was not till the example was followed in many places, and when even our public schools

had undergone a great change in this respect, that this room ceased to be an object of attraction.

The old room, however, was low studded and badly ventilated. Therefore, at the end of twenty years, and in accordance with the increased knowledge of physiology and school architecture, the old building gave place to the present structure; which for beauty, convenience, comfort and health, is surpassed by few, if any, in the country. So great was the regard for the old building on the part of some of the earlier members of the school, that it was, out of deference to that regard, taken down and much of it burned, lest, if it should be removed, it might be occupied as a residence by some degraded specimens of humanity. As beautiful as the new room is, I have been told by some of the earlier scholars, that the effect on their minds is not so great as that which was produced by their first entrance into the old one. The present room, though a great improvement on the former one, is by no means so far in advance of the times as was the old. Indeed it would have been a needless extravagance to have made it so. And here it may be proper to say that the desks and chairs, which were thought to be an expenditure so extravagant and wasteful at the organization of the school, are still standing in the new building. After having been used thirty years, they are so good, that with proper care they may last many years longer.

A punctual and regular attendance at school, I have deemed a very important element of success. As one of the means of accomplishing this end, a record of every minute's lateness and absence has been kept from the beginning; and from this record it would be easy to shew every individual the exact amount of her deficiency. But as the reading of this, would really "tell tales out of school," it shall be omitted on this occasion. Let me rather add that a very large number have manifested a praiseworthy zeal to keep their names free from any demerits. Sometimes this may have been carried too far; but probably the number who deserve any blame for their zeal in securing a perfect attendance, is very small. A large number have attended an entire year without a single mark for deficiency. And this may be considered quite an effort, when it is said that all who were not in their seats, though they may have been within the door or half-way from the door to their seats, have been marked, at least one minute late. Several have attended two entire years—one three years and one quarter, and another four years, without a single mark of deficiency. This last individual was not late during the whole of a course of nearly six years; nor absent during this period, with two exceptions—the one of five days, in her fifth school year, on account of the death of friends—the other, of ten days, near the close of her school, on account of her own sickness, by measles.

This young lady is one of the second generation, and the case is especially commended to the consideration of those who are inclined to suppose that all virtue and true worth belong to past generations. Since the commencement of the school, I have lost, at three different times, eleven weeks, and have been late one minute. But as I was within the

door when the clock finished striking, and as it has been the custom to remit the demerit for one minute's lateness, if that has been the only mark against a scholar, I, therefore, take this, the only occasion which will be presented to me, to ask for the removal of this one demerit. I will promise never to repeat the offense under similar circumstances. Shall it not be done?

The question has often been asked why, for many years, there have been no examinations or exhibitions in this school. This question may demand an answer. At the end of the first six months of its existence, there was a brief examination and exhibition, which was limited to half a day. At the end of two years, a still more general and public one took place, in a hall which was capable of holding three hundred persons. The hall was filled to its utmost capacity. Afterwards, at intervals of two or three years, three classes of five members in each, were, at the time of leaving school, subjected to a critical examination for two or three days, before committees of intelligent gentlemen, who were specially invited to be present for this purpose, and who availed themselves of the opportunity given them, to take an active part in the examination. Testimonials expressing the results of these examinations were given by these several committees. That which was presented after the examination of the first of these classes, is in the hand-writing of the distinguished gentleman who presides on this occasion, and I will ask Professor Lincoln to read it.

PROVIDENCE, Dec. 8th, 1831.

MR. JOHN KINGSBURY:—

Sir:—The undersigned, who have, for the last three days, attended the examination of the young ladies who have completed the course of study pursued under your instruction in the Young Ladies' High School, would do injustice to the young ladies, and to yourself, as well as to themselves, if they did not communicate to you the impression which they have received from the exercises which it was their pleasure to witness.

The class was examined in Arithmetic, Algebra, as far as affected quadratic equations, Plane Geometry, Natural Philosophy, Chemistry, the Philosophy of Natural History, General History, the History of the United States, Logic, the Philosophy of Rhetoric, Virgil's *Æneid*, Cicero's Orations, and English Composition. We were informed that they had pursued also the study of Blair's Rhetoric, Intellectual Philosophy, Watts on the Mind, Botany, Political Economy, Moral Philosophy, and Natural Theology. In these latter departments of science the time allotted for these exercises did not allow of our witnessing their proficiency.

The examination was conducted, on your part, with the manifest desire of presenting to the committee a full and candid exhibition, both of the acquisitions of your pupils, and also of the modes of instruction under which those acquisitions had been made. It was your wish that we should test their knowledge by any questions which we might wish to propose. Having frequently availed ourselves of this privilege, we feel a confidence in our opinions which could not otherwise have been attained.

It is with great pleasure, that, under these circumstances, we are enabled to state that the young ladies evinced a thorough, free, and familiar acquaintance with every branch of science in which they were examined. It was also evident that they had so acquired knowledge as to expand and invigorate every power of the mind, thus accomplishing the highest object of education. And we particularly remarked that the thrilling desire to excel, by which they were animated, seemed unalloyed with the least appearance of rivalry; and that the confidence in the certainty of their knowledge which their attainments justly conferred, was

everywhere blended with that refined delicacy of character which forms the highest ornament of the female sex.

In presenting you with this wholly unsolicited testimonial, we assure you that your success fully realizes our most sanguine expectations, and that we know of no situation whatever, in which our daughters could be placed under better advantages for moral and intellectual cultivation, than are enjoyed in your institution.

Allow us to add that we believe you would render a valuable service to the cause of female education, by furnishing the public with an account of the mode of instruction which you have pursued with such signal success.

We are, Dear Sir, with sentiments of great respect, your obedient servants,
 F. WAYLAND, Wm. T. GRINNELL,
 Z. ALLEN, THOS. T. WATERMAN,
 HENRY EDES, R. ELTON.

After the third and last of these examinations, feeling that the character of the school was sufficiently well known, and that there were many disadvantages attending the more or less public display arising from these occasions, I determined to throw open the school, at all times, to parents and friends of education, and to discontinue all regular public examinations.

Upon no other subject has there been a greater diversity of opinion among teachers, than that of emulation. While there are some minds that will be incited to go forward by the mere love of what is right, it is not so with mankind generally. God, himself, in his gospel, has condescended to appeal to our hopes and fears, as well as to our love; and I have not hesitated to suppose that we, hereby, may learn a useful lesson in adapting our instructions to the minds of the young. Though I have ever endeavored to place before them the highest motive, regard to the will of God, I have not hesitated, from the first to the last, to award, not prizes, but testimonials for excellence in every department of the school. These have been varied. Sometimes they have been graded lists of names posted up in the school-room, giving the relative rank of each scholar. At other times, they have been gold and silver medals, or books, or a simple vignette of the interior of the school-room. These have been the most effective for the longest period of time. I know that I can appeal to my beloved pupils now present, to bear me out in saying, that the desire to excel, however strong, has seldom, if ever, had a tendency to produce the ill will of one towards another, or to mar the sense of justice. There has never been a time when the judgment of the school in reference to true excellence in any particular individual has not been correct. The aggregate judgment has always been right.

It may be thought that the topic of government is too delicate for discussion on the present occasion; and yet in its bearing on education, it is second to none. There is no other, in which, after all my endeavors, I have come so far short of my ideal. It has been my aim to have the government as strictly parental as possible, and so to govern that the school might think that they were doing it all themselves.

I have endeavored to govern as little as the case would allow; yet regarding an ungoverned school as necessarily a bad one, I have been compelled, sometimes, to pursue such a course as has seemed to some unnecessarily rigid. In this respect, however, I am willing to appeal from the school girl to the woman. It gives me great pleasure to know that many

have already changed their opinions, and learned to approve what, in their school days, they were inclined to condemn. There cannot be a clearer deduction from the teachings of the past, than that no school can exist any great length of time, without requiring some things which will be distasteful to the young, and which will clash with the current sentiments of much of what is called good society. For though the tendency of such society is towards the largest liberty, yet this same society will not long tolerate a school which is conducted on this principle.

But the time is passing, and I must not extend my remarks. Were I to sum up, in few words, the characteristics of the school, or rather what I have aimed to make these characteristics, a part of them would be the following :

1. To have the moral sentiment of the school always right.
2. To have the scholars feel that no excellence in intellectual attainments can atone for defects in moral character.
3. To form exact habits, not only in study, but in every thing.
4. To have all the arrangements of the school such as are adapted to educate woman.
5. To educate the whole number well, rather than to elevate a few to distinction.
6. To train them to happiness and usefulness by a harmonious cultivation of all the powers of the mind, rather than to render them remarkable for genius or intellect.
7. To make them intelligent and efficient without being prone to ostentation or pretension.
8. To make them feel that common sense is more valuable than literary or scientific culture.
9. To make elementary studies prominent throughout the whole course ; so that spelling—old-fashioned spelling—and the higher ancient classics have sometimes been contemporaneous studies.

There are those who regard the school as a successful one. If it has been such as to justify this impression, some of the elements of that success, in addition to those already given, are the following ; all of them having reference to myself.

1. Unremitting labor from the beginning to the present time.
2. Never being so satisfied with past or present success as to indulge a tendency to inactivity.
3. Beginning every term with the same strong desire to make some additional improvement, as I at first felt for success itself.
4. Adopting every real improvement in education, whether it was demanded by public sentiment or not.
5. Rejecting every thing which did not approve itself to my judgment after examination and trial, though it might be demanded by public sentiment.
6. Never allowing the public to become better acquainted than myself with educational interests, especially such as related to the education of young ladies.

7. Daily seeking the special aid of Heavenly wisdom and guidance.

And now at the end of thirty years, I find myself but imperfectly satisfied with the result. Yet, as I look upon the long line of those, who have been members of the school, as I behold them adorning the stations of life allotted them by Divine Providence—whether or not I have been instrumental in any degree in preparing them for these stations—I am not unwilling to challenge the world to present a more intelligent, a more efficient, a wiser or a nobler band of women.

It has been well said, that though men die, institutions live. Though I leave the Young Ladies' High School to-day, the institution lives. May he who will assume the charge of it, meet with the same favor from this community, that I have received, and may the results which he shall produce, be far more satisfactory both to himself and others, than those which have attended my labors.

At the close of these remarks by Mr. Kingsbury, the following contributions from those who had been members of the school, were read to the audience by Professors Lincoln and Dunn, whose services in this respect, added much to the interest of the occasion.

1. *The examination of 1834.* By MRS. JANE ANTHONY EAMES, a member of the class of that year.

On this day, dawns a new era in the educational history of our fair city,—the close of the Young Ladies' High School, under the superintendence of its first Principal; of one who, for thirty years, has made himself respected and beloved by all who have been privileged to be his pupils. Doubtless, this day, and this event, will call forth contributions from abler pens than mine; still, may I hope that my offering, humble though it be, will not scornfully be put aside.

Being, emphatically, one of the "old scholars," I feel myself privileged to go back to the time when many of these fair girls before me had not entered upon this mortal life, and to tell them a little about the class of which it was my happy lot to be one, and of the examination which closed our career as members of the "Young Ladies' High School." We numbered five; perhaps, like Rory O'Moore, we thought "there is luck in odd numbers." Two of the class had been seven years in the school; two, five; and one, only two. We were studious girls, (I am sure I may say that without taking too much upon myself;) and, as in those ancient days we went to school for the old-fashioned purpose of *studying*, not *playing*, we, really had not been all that time at school for nothing. Our Principal, ("may he" in Eastern parlance, "live a thousand years, and may his shadow never grow less,") judged it expedient to finish our school course by a public examination; and so, at the close of the summer term, in 1834, the examination took place. As, unfortunately, no "chiel was among us taking notes," I have nothing but my memory to help me out with the recollections of that all important examination, which was held in Franklin Hall, larger at *that* time than *this*, when *extension* and *expansion* are the order of the day, and our sex makes up in circumference for—I shall not say what. Our examination lasted two

days. On the first day, there were present only our "paternal derivatives;" the Faculty of Brown University, the school committee, the clergy, and the learned men of our city, not included in the above-mentioned bodies. These "grave and reverend seigniors" were permitted, nay, requested, to put to us any questions they pleased; and in many of the lessons, I beg pardon, *branches of science*, in which we were examined, our Principal, with becoming modesty, retired into the background, leaving particular members of those learned bodies to conduct the examination themselves. On the second day, besides those present the day before, each member of the class was allowed to invite thirty of her friends, while the Principal invited as many more as the hall would comfortably seat. On each day the examination lasted five hours. At one time we were soaring along the blue vaults of Heaven, gazing at planets and distant worlds; and at another, we were plunging into the very depths of the earth. Now, we were discoursing of Kings, Queens, and royal personages, as though we were as familiarly acquainted with them as with our alphabet; and now, showing how thoroughly conversant we were with grammatical, rhetorical and philosophical lore. Anon, we were standing before the blackboard, demonstrating intricate problems; showing conclusively that A, B, C , equalled D, E, F ; and then, by cabalistic figures, proving that "plus" and "minus" if properly managed, would come out right at the last. To show that females could use more tongues than one, our acquirements in Latin and French were brought forward, and I am ashamed to add, in Greek, too, for I am afraid we *now* know Greek, as many of us know distinguished personages—*only by sight*.

Then came "the grand finale," each one reading a composition; the valedictory calling forth, as usual, a great display of white handkerchiefs, and what is not so *pleasant*, or so *romantic*, a great blowing of noses!

And then each member of the class was presented with a testimonial, to the effect that she had "finished the course of study pursued at the Young Ladies' High School."

At this late period of time, it is impossible for me to recall what we wore, at that grand examination; but of one thing I am sure, no one appeared in a "pea-green silk skirt and white basque;" neither did any one sport a "scarlet petticoat;" those costumes not having then been introduced into fashionable life.

For more than twenty years, our class remained unbroken. All married; all, except one, had smiling children around them; all, but one, crossed the Atlantic—some, more than once—and visited foreign scenes. At last came Death, and took the fairest, loveliest of all. In her ripe beauty and matured womanhood, she passed away from this world of sorrow and trouble, to one where all is joy and happiness forever.

We were five; and although

"One is dead, her spirit is in Heaven,"

we say, like Wordsworth's "little maid," we *are* five still.

And now, loved classmates and fellow pupils of the "Young Ladies' High School," I bid you farewell. May the memory of our school-days

be ever pleasant and fragrant ; and may he, who for thirty years has stood at the helm, and guided this institution on its *onward* and *upward* course, be abundantly blessed by the loving Father of us all.

2. *Lines to My Teacher.* By ISABEL E. BALLOU, a recent pupil.

Hail to the chief, who in triumph advances,
Trumpet and pibroch, to greet him may sound ;
We, to *our* chief, give five hundred bright glances,
Smiles from one lip to another go round.

Dear will his greeting seem,
Where'er his face may gleam,
Under the bright sun, or where the dark shade is ;
Then let our welcome be,
Long live JOHN KINGSBURY ;
Hail to the chief of five hundred young ladies.

Thirty long years of his life has he striven,
Battling with ignorance ; harder, by far,
Than that which history to us has given,—
Europe's remarkable "Thirty Years' War."
Long has he fought, and well ;
But for his shot and shell,
Lexicons, at us, their "parts of speech" thundered.
Then give him all respect ;
He, who for intellect
Fought, and has conquered, this valiant five hundred.

Presidents of our most wonderful nation,
Find it hard work to rule men at their will ;
What would they think of the nice situation,
Forty-three school girls, at once, to keep still.
Hark ! from the sky a sound
Comes through the air around,
And from the depths of the lowermost Hades,
"Shall we not praise him, then,
Champion of married men ;
He who kept silent five hundred young ladies."

No more shall we, in our ante-room crowded,
Sad, of the length of our lessons complain ;
Nor, when our forms in our wrappers are shrouded,
Shall we e'er hear of such kissing again.
Kisses to right of us,
Kisses to left of us,
Kisses in front of us, volleyed and thundered,
And we shall see no more,
What we have seen before,
Out of the school-house door, charge *our* five hundred

But he has left us :—in vain we lament him ;
Vain, to his High School we call him again ;
For as Commissioner, Governor has sent him,
All of our High Schools to superintend.
But when we meet again,
Where'er we may be then,

Under the bright sun, or where the dark shade is,
 Let us all shout with glee,
 Long live JOHN KINGSBURY;
 Hail to the chief of five hundred young ladies.

8. *Sonnet, and Address to the present members of the School.* By MRS.
 R. T. WILLING, of Philadelphia.

Stay yet awhile, thou fair meridian hour !
 Oh, happy noon of life, more slowly glide !
 From these calm heights we see the valleys wide
 Of youth's hot morning journey. O'er us tower
 The steeper which yet, with steps of firmer power
 And readier vigor, since by action tried,
 Our feet should climb. Meantime, the mountain's side
 Is sweet ;—sweet every gathered flower
 Our hands enfold, and sweet the sunny air.
 Warmth, clearness, fragrance, brightness, round us spread
 From vale and plain, soft breezes upward bear
 Echoes of tones that made the morning glad :—
 Linger, fair noon ! Blest memories of thy light
 Shall brighten all our pathway till the night.

Such is the strain that, from the matron band
 Of elder sisters downward floats to you,
 Young pilgrims through the valleys, fresh with dew,
 And bright with sunbeams, of the morning land.

They waft their greeting through the mid-day air,
 And pausing on the steep and upward slope,
 With voices soft with memory, glad with hope,
 Would say 'not *Youth alone*, but *LIFE* is fair.'

But late they wandered 'neath yon cloudless skies,
 Glowed on their heads the sacred, early light ;
 And radiant mists of morning veiled the height
 Where now their arduous noontide pathway lies.

Oft would they press the turf with fervid haste ;
 Then, lost in dreams of tender languor stand ;
 Now, fill with opening buds the eager hand ;
 Now, idly bend each gliding stream to taste.

Not every fount they quaffed with ardent lip,
 Bore health and coolness on its crystal wave ;
 Here the dank marsh its slow defilement gave,
 There deadly flowers their poisoned chalice dip.

Nor bloomed to life in that sweet morning air,
 Each tender bud they gathered to their breast ;
 Some idly held, and some too closely pressed,
 Fell from their grasp, or withered 'neath their care.

Yet, tasted then, from many a living spring,
 Still pure refreshment glides through every vein ;
 And still, these hands, with loving clasp, retain
 Full many a bud in ripened blossoming.

Like you, scarce recked they of the ascending way,
 Glad wanderers of the valley and the plain,
 Till round them closed the rugged mountain chain,
 And its cold shadows on their pathway lay.

Dread not that hour, young pilgrim ! thou shalt feel
 Unwonted power re-animate thy frame ;
 Youth's fervid haste to steadfast action tame ;
 Youth's tender languor brace with nerves of steel.

Yes ! gladly drink that ether keen and clear !
 Bend thy light footstep to that toilsome way !
 A two-fold vigor shall thy trust repay,—
 Strong in thyself, and strong to aid and cheer.

Nearer shall press, to share thy joy, thy pain,
 The loved ones, through the cloud and sunshine tried :
 Children shall gather at thy sheltering side,
 And thy firm arm the aged shall sustain.

Thine eye shall pierce to depths undreamed before ;
 In skies serene and luminously clear,
 And o'er the mountain gorges, dark and drear
 Shall see, far up, the sunbright summits soar.

Thine ear shall catch the myriad tones that rise
 From the near valleys ; from the far-off steep
 Shall hear the avalanche slide, the torrent leap,
 And gather all the great world's harmonies ;

And on full many a well-earned vantage ground,
 Where verdant slopes replace the rugged soil,
 Sweet respite shalt thou take amid thy toil,
 And gaze below, above thee, and around ;

Shalt joy to see the great horizon spread
 Wider, more fair ; while plain and valley merge
 In realm and state, and on the distant verge
 Gleams the vast sea, by rolling rivers fed.

Round thee are still thy loved ones ;—larger faith
 Binds thy glad soul to all the mighty band,
 Gathered from every clime and every land,
 Who, with thee, tread the still ascending path ;

And o'er thee bends the bright and happy sky,
 Radiant with blessing ; and its wondrous dome
 Is to thee but the boundary of thy home,
 And all its clouds are lovely to thine eye.

Yet, onward ! upward ! for the steady sun
 Begins from his great zenith to decline ;
 Through golden mists his level glories shine ;—
 Onward ! for nobler heights may yet be won ;

Till, all too soon, the glory in the West
 Proclaims thy journey and thy day are past ;—
 Night softly shrouds thee in her mantle vast —
 The Eternal Morn awaits thee,—take thy rest.

4. *Life's Lesson.* By MRS. CAROLINE CRANE MARSH, of Burlington, Vt

When barks, that left the self-same port,
 But long by warring winds parted,
 Meet, for a respite passing short,
 In the fair haven whence they started;
 The precious moments should they waste
 Recounting perils past?—or rather,
 For the new voyage, with prudent haste,
 Refit each sail, fresh sea-stores gather?
 What, though their snowy canvas, worn
 Erst proudly as a bridal veil,
 By rain and tempest stained and torn,
 Scarce serve to catch the favoring gale;
 Though faded flag and pennon show
 So pale that hardly comrades know
 Each other! They must brave the deep
 Again, and may not pause to weep
 O'er chance or change. Yea, it may be,
 Within each wave-washed vessel lies,
 Snatched from the wild, resisting sea,
 Worth all this loss, a noble prize,—
 Corals and pearls, and shining amber,
 Treasures reserved for those who tread
 The floor of ocean's secret chamber,
 And feel the billows o'er their head!

So are we met, and so would choose
 New strength for toils renewed to borrow;
 Nor the fast flying moments lose
 In telling weakening tales of sorrow.
 If we have struggled, suffered, lost—
 Who wins the prize without the pains?
 For all that youth and health can boast,
 Would we resign our hard-earned gains?
 Oh, surely, no! Advancing years
 May bring their trials and their tears;
 Youth hath one load more grievous far
 Than all life's later burdens are—
 The care for self—self, still the same
 Unconscious spring of every aim!
 But we have learned from Time's stern teaching,
 How small a drop in life's wide sea,
 How light a leaf upon the tree
 Of our humanity broad-reaching,
 One little self must ever be!
 Learned that for self much thought is vain,
 Nor take such burden up again;
 We would serve God and man as best
 We may, not careful for the rest.
 Nor lack we great examples still
 To fire our hearts with quenchless zeal.
 They tell us 'tis an age of crime;

That ruled and re.
 That justice leaves
 Nor longer pleads the righteous
 That men bow down to Mammo
 But 'tis an age of heroes, too!
 Heroes and martyrs, tried and
 As ever saved the world of old.

Behold them force a pathless
 Through burning continents,
 Of life or death, if so they may
 Knowledge and truth abroad

Behold them in the icy seas
 Eternal frost and famine
 Through awful nights with
 A hapless brother to release

Behold the new crusading
 That toward the gates of
 To rescue misbelieving
 Or in the glorious conflict
 Not now with flashing
 And helmet plumed, and
 They seek the bloody
 With peace their wear
 Their only sword the
 And with a love and ze
 As ever nerved a mart
 They bear the gospel
 To nations wrapped

Even woman, now
 Hath waked from lo
 And, with her noble
 What well with he

We see her leave
 And, lengthening
 Stand calm wher
 And pestilence d
 What doth a ger
 Where heaps of
 Where groans a
 She tends the
 And lo! at her
 The groan and

To yon lone h
 That neareth
 While gather
 And clouds of
 Confusion r
 All will con
 Where is it
 Where do
 With fever

Life clenched with death in fearful strife,
 He on his narrow couch doth lie,
 And by him sits his girl-like wife.
 From ceaseless watchings pale and weak,
 On those unconscious features, still
 Are fixed her tearful looks that speak
 Of grief and love ineffable.
 She hears the tumult o'er her head !
 Another light is in her eyes ;
 A few short words of prayer are said,
 And to the reeling deck she flies.
 At her command the strife is staid ;
 Wisely she points the vessel's course ;
 Lo ! the shamed helmsman hath obeyed
 The voice of that same gentle nurse !
 Thus she, through many a dreary day,
 And many a night of dark despair,
 Doth show the doubtful ship her way,
 And for a dying husband care.
 Nor doth that noble spirit quail
 Till safe in port she furls the sail.
 Of woman's rights no question here !
 She rules by right divine, as clear
 As England's queen, whose iron sway
 "First"—so sings Spenser's lofty lay—
 "Taught man a woman to obey."

But, hark ! what strain comes o'er the sea,
 Fraught with divinest melody !
 From woman's burning lips ne'er brake,
 Since Grecian Sappho's tuneful youth,
 Such songs as, winged with flaming truth,
 Daughter of England ! thou dost wake !
 Higher and yet higher swell thy lays,
 Applauding nations sound thy praise ;
 And bind thy brows with deathless bays !

Happy we hail the youthful band
 Of sisters that beside us stand—
 Thrice happy—that an age grown wise
 Now bids them boldly dare and do
 Like these ; nor fear that such emprise
 Should prove them less the woman true.

And thanks and honor be to him,
 Whom tripling decades rolling round,
 Still at his chosen work have found ;
 With heart unchanged, and eye not dim,
 Nobly his task he hath fulfilled.
 Long may he live, each day beholding
 Fair fruits, and fairer still unfolding,
 In the wide garden he hath tilled !

The above papers were selected from a larger number in both prose and verse that were contributed for the occasion, as being more suitable than the others to be read in public. When the reading of them was concluded,

Rev. Dr. Sears, President of Brown University, delivered an address, in which earnest views of Female Education were happily blended with humorous allusions to the scene before him. Of this address we have obtained, the following brief report:

I take pleasure, sir, in uniting with you and others in doing honor to the founder and successful teacher of this school. What its character, from the beginning, has been, we have already been told. It is fitting that the University, for whose interests he has labored with an assiduity almost equal to that with which he has watched over his own school, during so long a period, should pay him this tribute of respect.

To this large company of ladies, who were once his pupils, it may seem strange that he, who was, as they will remember, so cautious in respect to their receiving calls from this quarter, should, all of a sudden, so entirely change his policy as to invite them to meet in the College Chapel. But, on such a day as this, when mothers and daughters come together for the last time to greet their common teacher, the heart even of the inflexible teacher, softens instinctively, and relaxes a little from the rigor of school discipline. And just here I have a secret to tell you. It is vacation in college. Need I tell you that Mr. Kingsbury probably knows that fact?

Ladies, I can lay my hand on my heart, and say most sincerely, I am happy to see you here; for when your sons, brothers, cousins, or nephews are about sixteen years old, and have completed their preparatory studies, I expect you will remember this day, and will think of Mr. Kingsbury, as a well known and good counsellor, and will ask his advice as to the place of their collegiate education. Mr. Kingsbury is a candid, wise and good man; and you are in no danger of thinking lightly of his advice.

I cannot say that I am disinterested as I stand before such an audience. Mr. Kingsbury is my friend; and he is your friend. There is a common bond; and I feel the influence of it. When the new Commissioner of Public Schools shall make his official visits in different parts of the State, my sympathy with him in his efforts for the advancement of popular education will very likely induce me to accompany him, especially if it be a few weeks before the first Wednesday in September. He will, of course, call on his old pupils, taking me with him as his friend, and the recollections of this day will be revived. I shall then hope through your kindness to see some of those young men already referred to, when it will become apparent how deeply interested I am in them and in their education. This is between ourselves.

But to be more serious. I cannot think of the influence of the classes of young ladies who, for thirty years, have been successively nurtured in Christian knowledge in this school, and then have gone forth to act their part in life, without pronouncing a blessing upon him, who has rendered to society so valuable a service. Constituted as society is in this Christian land, what a wide sphere of appropriate influence does it accord to woman! This is yielded to her not merely on account of her sex, but on account of the virtue, intelligence, and refinement resulting from her

education. Who can measure the extent of the social influence of one highly cultivated and refined Christian lady? What a sweetness and sanctity it gives to the domestic circle of which she is the ruling spirit and the chief ornament! In the community where she resides, how much evil is prevented; and how many generous and noble sympathies are awakened by her very presence! Gross vice retires at her approach. Ignorance is abashed. Low and vulgar ornaments are spontaneously laid aside. Innocence, purity, and elevated sentiment lend their charm to social intercourse; and by degrees the manners and morals of a whole neighborhood are transformed by the gentle influence of one such person. What then must be the effect, when hundreds of such are introduced into as many little communities, or are thrown into the midst of society in our larger towns and cities!

In this country, where so little is known of factitious distinctions, women have a fairer field of useful and honorable activity opened before them than in any other in the world. In no other country is there a greater call for female education; in none is woman liable to greater vicissitudes in her condition. She is to be educated for all conditions. She may rise, if properly educated, from an humble condition to the highest positions in society: or she may, by unexpected changes of fortune, be obliged to descend from the highest circles, and mingle with the lowly. Let her, then, be educated for every possible condition in this wide range of chances. In her lot, she is somewhat dependent. To no small extent, her success will depend on the success of another. Let her be trained to follow with Christian dignity and simplicity the guiding hand of Providence wherever it may lead.

How shall the public morals, which are now so low, be improved but by introducing a purer atmosphere into social life? And who has the power of doing this so effectually as she who, if true to herself, so naturally presides in the social circle! Let the time never come when American mothers shall cease to be qualified, and, in some sense, inspired to train their sons to sentiments of true honor, patriotism, virtue, and religion. History teaches no fact more uniform, than that "every great man is his mother's son."

At the close of these remarks of President Sears, the exercises at the Chapel were concluded by singing the following Ode, written for the occasion, by HON. WILLIAM M. RODMAN, Mayor of Providence.

Memory wreathes each heart this day,
While old and young combine
To chant a grateful roundelay,
To golden days, lang syne.
To auld lang syne, this day,
We garlands twine;
And sing a joyous roundelay
To auld lang syne.

JOHN KINGSBURY.

The school house stands on yonder street,
Where we so loved to rove ;
And classic seems that calm retreat,
Our academic grove.

Then to auld lang syne, this day, etc.

Now gently sweep the pensive lyre,
While tears like dew drops shine ;
And softly touch each throbbing wire,
To days of auld lang syne.

For auld lang syne, etc.

And thou, kind teacher, father, guide,
For thee, a wreath we twine ;
And place it round thy brow with pride,
For deeds of love, lang syne.

Aye for auld lang syne, etc.

Those days, lang syne, when thou wert young,
Like present moments shine ;
Then take from lip, and heart, and tongue,
A song for auld lang syne.

For auld lang syne, etc.

And when thy faith is changed to sight,
And years no more are thine ;
May Heaven be filled with memories bright,
Of earth-born days, lang syne,

And may we all together meet,
Where loves immortal twine ;
And, gathered round our Saviour's feet,
Chant songs of love divine.

After these exercises at the Chapel of the University were concluded, Mr. Kingsbury's pupils and friends visited him at his residence, where they were hospitably entertained, and the remainder of the day and the evening were devoted to social enjoyment, and the interchange of pleasant memories and mutual good wishes. Thus closed this happy reunion of those who at different periods, have been members of the Young Ladies' High School in Providence during the thirty years which have elapsed since its foundation. It was a genial and interesting festival, and was well fitted to mark in the minds of all who participated in it, the event in which it had its origin, the retirement of the founder and Principal of the School from the care of its future instruction and management. He has already entered upon the duties of the office to which he had been appointed, and we need express for him no better or more friendly wish than that the future of his career may be as largely productive as the past, of services in the cause of education, and as fully crowned with the respect and honor of his fellow citizens.

II. VENTILATION IN AMERICAN DWELLINGS.

WE have frequently had to direct attention to the many different aspects in which the question of Ventilation comes under review in considering the construction and management of schools; and in the article in a preceding number, on a College of Architecture, by Dr. D. B. Reid, the general relations of this question have been entered into in connection with other departments of architecture. A valuable volume,* by the same author, is now before us, dedicated especially to the ventilation of American dwellings; and the views in reference to individual rooms, habitations, and hotels, give the result of the author's experience in a series of examples, which are explained by wood-cuts and colored diagrams.

The work commences with an exposition of the present state of the question of ventilation, of the magnitude of the objects it involves, and of the means by which they may be most effectually promoted. A special ventilating flue or shaft is recommended to be introduced generally into American dwellings, where the severity of the summer's heat, and the varied consequences flowing from this cause, are prone to produce oppressive effects. A form of construction is advocated that enables it to act equally on crowded rooms, on the sick-chamber, and in excluding vitiated air from special sources.

Extended arrangements are also recommended for directly cooling the air in sultry and oppressive weather, and enabling a milder atmosphere to be procured from vaults or the shaded side of the building—an object that is at present rarely under any systematic control.

The ventilation of the sick-chamber in cases of infectious disease, is explained by different examples, and the mode of treating this question, where it is desirable to maintain an artificial atmosphere, and to destroy by fire or chemicals all noxious emanations. While windows, constructed so as to admit of being opened above or below, form an important provision in the ventilation of all ordinary apartments, improvements in details, and the introduction of other resources, are shown

* VENTILATION IN AMERICAN DWELLINGS, with a series of Diagrams, presenting examples in different classes of habitations, by David Boswell Reid, M.D., F.R.S.E., &c.; to which is added an Introductory Outline of the Progress of Improvement in Ventilation, by Ellisa Harris, M.D., &c., &c.: Wiley & Halsted, New York.

to be equally necessary and economical. The progress of ventilation has often been much retarded by the supposition that the plan adopted in one place should succeed equally in another, though, on close examination, such an utter disparity of circumstances may attend the two cases that no proper parallel can be instituted between them. In ventilating an apartment, a sufficient supply of air, at a proper temperature, and with as much diffusion as may be practicable, being secured, and a corresponding egress of vitiated air, nothing will contribute more to facilitate the arrangement of details than the understanding that these may be indefinitely varied according to the peculiarities of each individual structure, and the perfection which it may be proposed to attain.

The tabular exposition of the varied causes that influence the effect produced by particular atmospheres on different constitutions, presents this branch of the subject in a more striking point of view. This was drawn up originally for a Report made by the author when the Health of Towns Commission was in operation in England. No one can inspect it without coming to the conclusion that a large amount of discomfort, disease, and suffering must perpetually arise in crowded cities, populous districts, and individual habitations, wherever the ordinary conditions of life, and its relations to the air, are imperfectly understood. It is a great step in the right direction to become better acquainted with the realities of the case. The varied examples given explain practically many of the most important details, and the resources available to meet peculiar contingencies by ascending, descending, and mixed movements, by great diffusion, by lateral currents, and with or without artificial means, according to the necessities of each individual case.

The power of producing an interior climate in the entrance hall, stairs, and passages of ordinary habitations, is strongly advocated, and the importance of not building any of these, in warm or cold climates, of such dimensions or in such a manner as to present any obstacle to the effective and economical attainment of this object.

Great importance is also attached to the hygrometric condition of the atmosphere in this country—houses in the Northern States being generally very inadequately supplied with moisture in winter,—making allowance for the great elevation of temperature that must frequently be given to the air in very cold weather, and the very dry condition in which it is received from the external atmosphere. In other places an excess of moisture is the great defect.

A ventilated air and steam bath, combined with a warm shower-bath, is explained by special diagrams, and its introduction recommended as superior in efficiency, economy, and rapidity of action to any

other bath, while it exerts a refreshing influence on the constitution that is often powerful in checking incipient fever. Warm diluents can be taken freely when the action of the bath is sustained for any considerable period. In general, it is not necessary to prolong its action after the breath shall have been freed from any taint or heaviness which it may previously have presented.

On the subject of warming, the more extended use of the Mild Steam and Hot-water Apparatus is strongly advocated, and the use of stoves having a more extended surface and a less elevated temperature than is usually sustained. The great evils to be remedied, are the rapid transference of hot air to the ceiling, while the floor is too often left uncomfortably cold, and the injured quality of over-heated air.

One of the principal obstacles to the right ventilation of individual habitations, arises from defective cleansing and other imperfect sanitary arrangements, in consequence of which the purity of the external atmosphere is often largely impaired. The construction of individual dwellings is another prolific cause of vitiated air; the provision for the ingress of fresh, and egress of vitiated air, exclusive of windows, being, in general, meagre and unsatisfactory. And, lastly, it is maintained, that till the chemistry of daily life shall form a systematic part of instruction in elementary schools, the mass of the population will never be able to avail themselves properly of all the resources which the present state of their habitations affords, and still less to promote the introduction of those improvements which new inventions, materials, and construction demand.

The work is preceded by an able outline of the progress of improvement in ventilation, drawn up by Dr. Elisha Harria, of New York, at the request of the publishers, in which he has given a notice of Dr. Reid's experiments and executed works, more particularly at the time he directed the plans at the late House of Commons, and when Lord Sudeley said: "To him," Dr. Reid, "we owe the solution of the problem that, by a proper system, ventilation may be obtained in the most trying and difficult circumstances." He also stated: "The ventilation of the House of Commons was complete and perfect, and the first plan of systematic ventilation ever carried out in this or any other country."

The following selections illustrate the manner in which Dr. Reid has treated the subject in the volume before us. In the different figures, red, purple, and blue tints indicate respectively pure air entering, mixed air and vitiated air escaping from the apartment ventilated.

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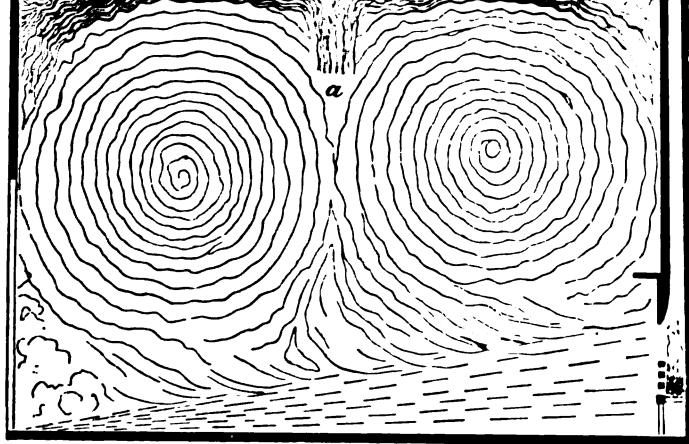
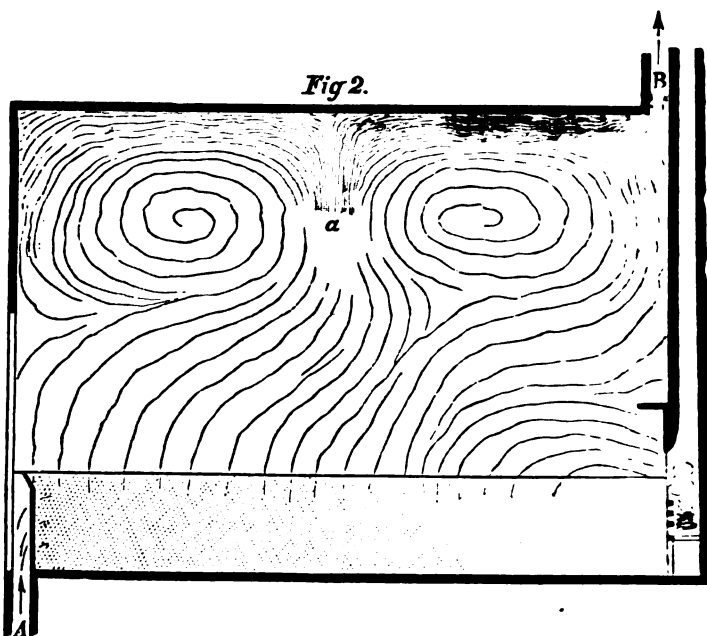


Fig 2.



VENTILATION OF A ROOM LOADED WITH PRODUCTS OF COMBUSTION FROM GAS, AND
SUBJECT TO OFFENSIVE COLD CURRENTS ON THE FLOOR.

"In a room warmed by an open fire, there are great complaints of a current of cold air passing along the floor, while the air on the line of respiration feels heavy and oppressive, producing great restlessness, particularly when a series of gas-burners are lighted that give a brilliant illumination. This is one of the most common forms of complaint in numerous apartments, and the causes will be obvious on inspecting the accompanying figures.

The air admitted being very cold, and entering partly by a slight leakage at the window, but principally below the door, from a passage not warmed artificially, has little tendency to rise, and passes along the floor to the fire-place. The gas, however, induces a powerful current at *a*, Fig. 1, which ascends with force and strikes upon the ceiling, where it is soon diffused, and descends on every side as it cools. Part of it mixes with fresh air below, and is carried off by the action of the fire; the rest ascends again by a rotary movement towards the gas-burners, where it mingles a second time in the current, ascending and descending as before. The upper portion of the air is accordingly largely charged with moisture and carbonic acid gas, the principal products of its combustion.

In Fig. 2, the principal arrangements necessary for removing these evils are shown in one of the many modes by which this can be accomplished.

A free supply of air is admitted by the flue A, being drawn from a central apparatus supplying warm air. A much smaller open fire is then sufficient; with warmer air it may be rendered unnecessary. In warm weather cold air is admitted by the flue A. It is not permitted to enter abruptly at one place, but diffused at the base-board by perforated zinc, or at a panel from which it escapes into the apartment to be supplied. A vitiated air flue, B, starting at the level of the ceiling, continuously removes the bad air, and preserves fresh air at and immediately above the zone of respiration, the great object in all ventilated apartments.

A reference to the succeeding diagrams will explain many modifications that may be adopted in carrying such alterations into effect.

The primary objects in all ventilation are the removal of vitiated air, and the introduction of fresh air in an imperceptible stream. The diffusion of the entering air in a chamber, air trunk, or channel, indicated by the deeper tint proceeding from A, Fig. 2, breaks its impetus in proportion to the extent of diffusion. The warmer the air

supplied, and the more distant from A the portion of floor generally occupied, the less is the amount of diffusion required. The vitiated air may be discharged directly into the external atmosphere, or any of the arrangements may be adopted that are indicated in Chapters IV and V."

SPECIAL VENTILATING FLUE.

The following figures, 8, 9, 10, 11, 12, explain the principal varieties of ventilating flues which Dr. Reid recommends to be introduced in all American dwellings, one or other being selected according to the local circumstances of each individual case, and provision being made for the safe application of power by heat whenever it may be desired.

"If a ventilating turret be erected on the roof of a house, Fig. 8, F, and a staircase, or any other descending channel *x* that may be rendered sufficiently air-tight, be connected with it, then, as in the case* E, minor ventilating tubes discharging vitiated air can be led into it, and a series of gas-lights kindled above at *x*, when the vitiated air is not sufficiently warm without them, to give the requisite ventilating power.

Fig. 9, G, indicates a similar arrangement; a chamber in the roof receiving the vitiated air from minor channels, which communicate with all the places to be ventilated.

The ventilating turrets F and G having no great amount of heating power, in cases where the utmost effect of a ventilating shaft is necessary, and when a turret on the roof would not give the necessary heat or altitude, it is requisite to make a descending shaft for collecting and carrying downwards all the vitiated air, and an ascending shaft for giving the moving and discharging power. H, Fig. 10, points out the usual and most convenient form given to such shafts, the arrangement indicating the course of the vitiated air. There is no limit to the size, nor to the number of apartments upon which a single shaft of this kind can be brought to bear, the amount of fuel used being proportionate to the ventilating effect required. The higher the chimney, the greater is the power exerted.

In climates where there are great extremes of temperature the ventilating shaft is often so constructed as to be used in winter fire, the temperature of the apartments ventilated, when the air is cold, giving the necessary power. Fig. 11, K, shows a similar to H, Fig. 10, provided with a valve opening admitting vitiated air to escape without any previous

* A modification of this form of flue referred to in a preceding

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m, and per-
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Fig. 8.F.

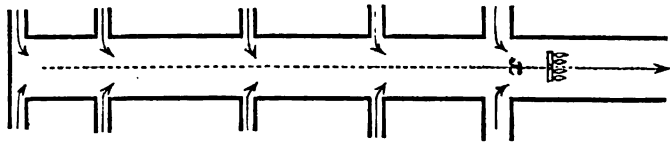


Fig. 9.G.

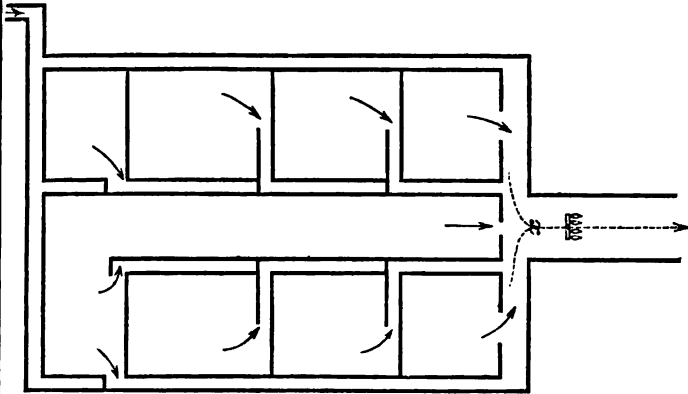


Fig. 10.H.

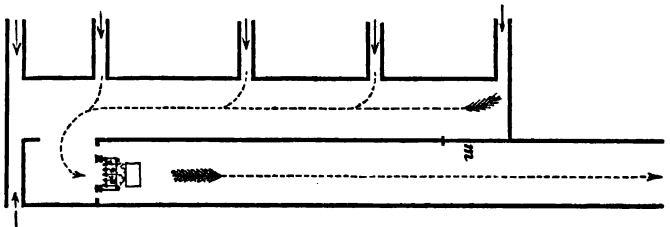


Fig. 11.K.

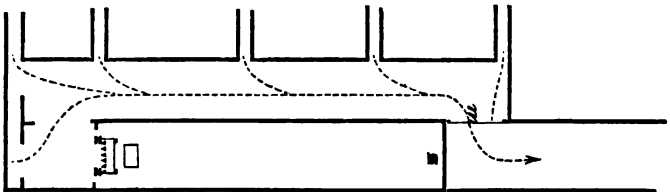


Fig. 12.L.

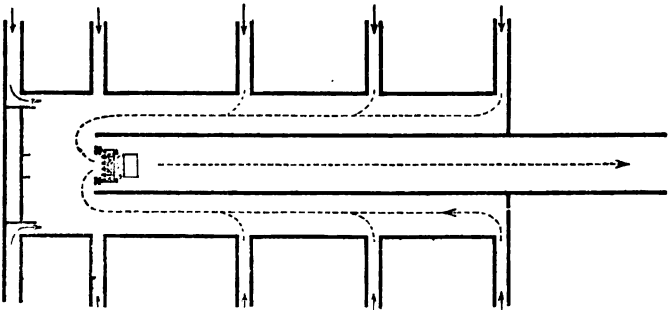


Fig. 42.

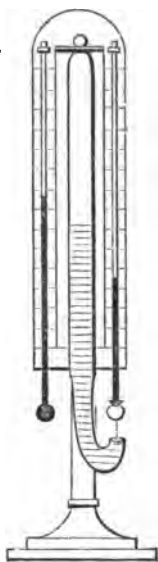


Fig. 40.

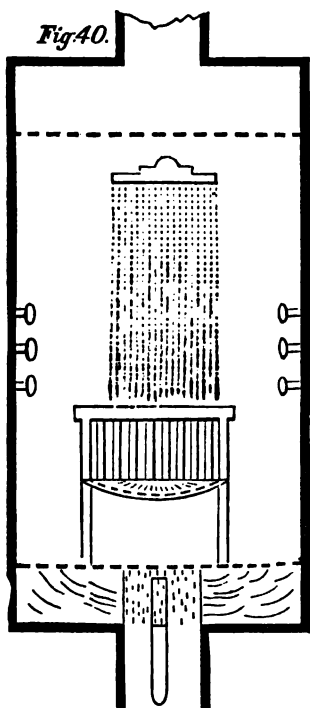
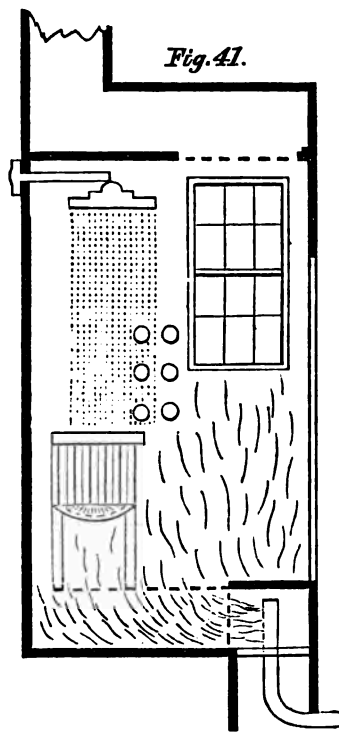


Fig. 41.



changing the position of the valve, *m* is closed, and an opening again restored at *z*, when fire can be employed to give the requisite ventilating power in warmer weather.

In many cases two descending shafts may be formed as in Fig. 12, *L*; or they may be multiplied to any extent, provided the aggregate power required to put as many as are wanted in effective operation at a given time shall not exceed that of the ventilating shaft.

In ordinary habitations a single flue of the usual size will be found very useful, but it is presumed that the time will arrive when no houses containing from ten to twenty rooms will be constructed without a ventilating turret, tower, or shaft from three to six feet square, according to the numbers it may be intended from time to time to invite, and the dimensions of the principal apartments.

SMALL CHAMBER FOR ARTIFICIAL ATMOSPHERES.—VENTILATED AIR, STEAM, AND
SHOWER BATH.

Artificial atmospheres may be formed in apartments on a larger scale than are indicated in the preceding figure, the means employed being proportionate to the magnitude required, and the numbers present at a given time. They are prepared most effectually by transmitting the ingredients necessary into an air channel through which a regulated current of air is made to pass. This current may be put in motion by a mechanical power, or by a heated flue. The latter is preferred for all ordinary purposes. For one person, a small chamber lighted by glazing it on one side and in front, sufficiently large to admit a chair, and allow any individual to stand erect in it, and having a platform or floor about four feet square, is sufficient for common use. An area of two feet six inches by three feet, may be substituted where it is desired to economize space and materials. In this chamber, supplied with one flue for the admission, and another for the discharge of gases and vapors, hot air, cold air, moist air, dry air, or any other atmosphere, may be conveniently applied to the system as a means of preserving health or curing disease.

The accompanying figures 40, 41 indicate a chamber of this kind, which it is recommended to provide in ordinary habitations, and also in hotels and lodging-houses, where numbers are congregated.

Seated in the chair shown in the figure, each individual can, according to his own taste, subject himself to a powerful current of warm or cold, dry or moist air. Or he can have a shower-bath of hot or cold water, or of water at any intermediate temperature.

But the arrangement is prized principally for the combination which it gives of a steam-bath, in which this powerful agent can be mixed

with warm air in any proportion it may be proper to adopt in producing a sudorific effect, while any admixture of volatile ingredients can be communicated to the passing air, the skin being exposed continuously at the same time, or as frequently as may be desired, to ablation with a warm shower-bath. The hands and body are not impeded from the fullest opportunity of using friction-cloths. The whole surface of the lungs and skin is subjected in the bath to the free oxidation of the air, and warm and palatable diluents being drunk copiously there to sustain the strength and promote perspiration, a quantity of water passes through the blood in a short time, which has the most wholesome and purifying influence. Care must be taken to reduce the circulation of the blood slowly in an adjoining warm room, after leaving this bath, before exposure to the external atmosphere.

The pulls shown on either side of the chair regulate the admission of air, the discharge of vitiated air, the ingress of steam, and the temperature of the water used as a shower-bath.

By these varied means, much additional power is given to the steam-bath, while the offensive atmosphere attendant on its ordinary use is entirely obviated. Such a steam-bath, in its simplest form, should not cost more than a few cents each time it is used, where it is provided for numbers.

DRY AND MOIST AIR.

A constant cough attacks an invalid in frosty weather, while the skin feels harsh and dry, and these effects are increased when a stove in the room he occupies is in use, though an iron basin containing water is placed upon it.

What remedy is available? Let a larger surface of water be exposed to heat, with a view of adding more moisture to the air. Let a well-tinned or porcellaneous vessel be substituted for the iron-vessel containing the water. If the complaints mentioned are not removed, try the effect of boiling water, and causing a free discharge of steam into the room, till it begins to condense rapidly, like hoar-frost on the windows.

Where any source of pure steam is available in the vicinity, a small branch-pipe from the boiler may be used for its introduction.

In hotels, lodging-houses, or other crowded habitations, where boilers are always available, the steam has often an offensive oily odor. It can then, at all events, be used in heating the porcellaneous or other vessel from which the purer steam can be prepared. In large buildings, where there is the opportunity, moisture conveyed to air by a steam-pipe should be mingled with the ventilating current of supply proceeding to any apartment, being then more generally diffused.

Where the wet-bulb hygrometer is used, Fig. 42, an atmosphere that is so charged with moisture that the ordinary thermometer indicates a temperature about five degrees higher than the thermometer having the bulb covered with muslin, and moistened, is found to be generally acceptable in England. In this country, the atmosphere being usually much dryer, or, in other words, having a greater dissolving power, it may be desirable not to give so much moisture as may be required to produce a similar quality of air in this respect. A nearer approximation to it, however, would in all habitations heated with little addition of moisture, produce a great improvement, by reducing excessive evaporation from the surface of the lungs as well as from the surface of the body.

If, on the other hand, air be too moist, and the temperature be not high, then nothing corrects this evil so conveniently as the communication of heat. It may not actually remove the moisture, but it gives the air a greater dissolving and retaining power, producing therefore an equivalent effect.

It is rarely that measures are resorted to for the actual removal of moisture, in consequence of the expense, except when this is effected by cold, or by the absorbing power of quick-lime, an agent of great value for this purpose in the sick-chamber, in rooms that are occupied almost as soon as they are plastered, and in damp-cellars.

VENTILATION OF HOTELS.—NOTES IN REFERENCE TO THE NATIONAL HOTEL DISEASE AT WASHINGTON.

In the largest mansions, palatial structures and hotels, opportunities occur for treating them to some extent in the same manner as public buildings, more especially the dining-room, the ball-room, or any apartment appropriated for public meetings or other assemblies. As it is not intended, however, that these pages should include the consideration of public buildings, it will be sufficient here to give an outline of some points not so specially mentioned hitherto, and to state that though a central ventilating power is generally the most desirable in individual buildings, cases constantly occur where it may not be an object to effect the most extensive centralization practicable, and in which therefore a few independent shafts or ventilating turrets may be advantageously introduced as a substitute.

There are also many instances where an engine may be used instead of shafts as a moving power for forced or systematic ventilation, though apertures for discharge should always be provided under any circumstances. Without these, vitiated air may often be driven from one room to another and not be discharged at a proper place; or it

may even recoil in one portion of an apartment, while fresh air is ascending in another.

It cannot be too strongly represented, that the greater the number of rooms, halls, and passages in any building, the greater the annoyance from vitiated air or from local and offensive currents, if a sufficient supply of air be not provided, and a well-organized escape for the vitiated air.

Further, the greatest perfection in ventilation is always accompanied by an ingress and egress, or supply and discharge, so balanced that there is no objectionable current at doors. If an objectionable current move outwards, then the supply forced in by the external air or by any instrument used for this purpose, must be too great, unless the discharge of the vitiated air be too small. On the other hand, if the offensive current proceeds inwards, then the supply of external air must be too small, or the action of the shaft or channel by which the vitiated air is discharged too great.

A little reflection on these two examples will simplify many cases that are apt to be very perplexing to those unaccustomed to enter on such questions. Nor is it possible in complicated buildings, such as large hotels, always to avoid such difficulties, where they have been built without regard to systematic ventilation.

There are four evils, however, to which many hotels are peculiarly subject, that can be entirely avoided with proper attention to them.

1. The accumulation of vitiated air in the public apartments, arising from the ineffective discharge of the products of respiration, of the combustion of gas, and from the presence of excessive moisture, or vitiated air in the refreshment rooms.

2. The prevalence of tobacco-smoke, an evil from which many hotels are remarkably free.

For the entire and absolute control of the vitiated air from smoking-rooms, a ventilating flue should be made to withdraw the smoke, so that it cannot enter into any passages, stairs, or other apartments where its use is not allowed.

3. Emanations from kitchens and sculleries.

Without a proper ventilating arrangement these can never be entirely excluded. Even if placed in external buildings the wind may drift them upon the hotel.

4. Vitiated air from closets, drains, and sewers.

The control and absolute exclusion of all vitiated air from these sources is equally indispensable to health and comfort.

The noted case of the National Hotel at Washington, where so many hundreds suffered very lately, was not unconnected with the

condition of the ventilation. Whether other causes contributed or not, is a question that is not entered on here; recent facts and statements that have been made on this point may leave this an open question till the whole of the evidence on the subject shall be published and compared, but in the mean time personal observations in this Hotel at the time referred to gave proof that there was, in one part of the hotel at least, a discharge of vitiated air from drains of so intense a character that it produced instantaneous vomiting on some occasions, and affected numbers in a less degree at the moment, who were nevertheless attacked at a subsequent period.

The report of the chairman of the Board of Health at Washington, Dr. King Stone, as well as the Report of the Committee of the Academy of Medicine of New York on this subject, fully express the conviction of the important effect produced by the emanations from the drains, and attribute the National Hotel Disease to this cause. No other cause has as yet been proved to have been in operation; and even if it were, it would in no way alter the conviction entertained, that the emanations from the drains constituted an evil of great magnitude, and capable of producing the most disastrous results.

Let it be recollected that there are no deleterious gases that can arise from the admixture of chemicals that may meet in obstructed drains and sewers, that may not find their way into hotels, houses, and other buildings, as well as the products of putrefaction from animal and vegetable matters. Sewers may discharge there the products formed at the distance of miles, particularly if they be trapped so as to exclude the access of air in the streets. And who can estimate the emanations that may not proceed from such sources, when they arise from chemicals discharged from a manufactory, an apothecary's store, a paint shop, a telegraph office, or the poisoned remains of animals that may have accumulated in the sewers? Further, the very cement or mortar may imbibe materials that discharge sulphuretted or arsenuretted hydrogen from compound mixtures on fermentation, or from the action of an acid, and these find their way, by a retrograde current in the drains and sewers, to any building connected with them, where the drains have been injured and the traps rendered ineffective.*

Lastly, it should not be forgotten that if one or two hundred thousand dollars be the probable amount of loss to the individual sufferers

* We understand that Dr. Reid considers it not improbable, if the statements made as to the use of arsenic on the premises are correct, that the effect of the malaria from the drains may, under certain circumstances, have been greatly aggravated by arsenuretted hydrogen gas; though no arsenic may have been dissolved by the water in use at the hotel, it may have been present in unlimited quantities in the obstructed drains.

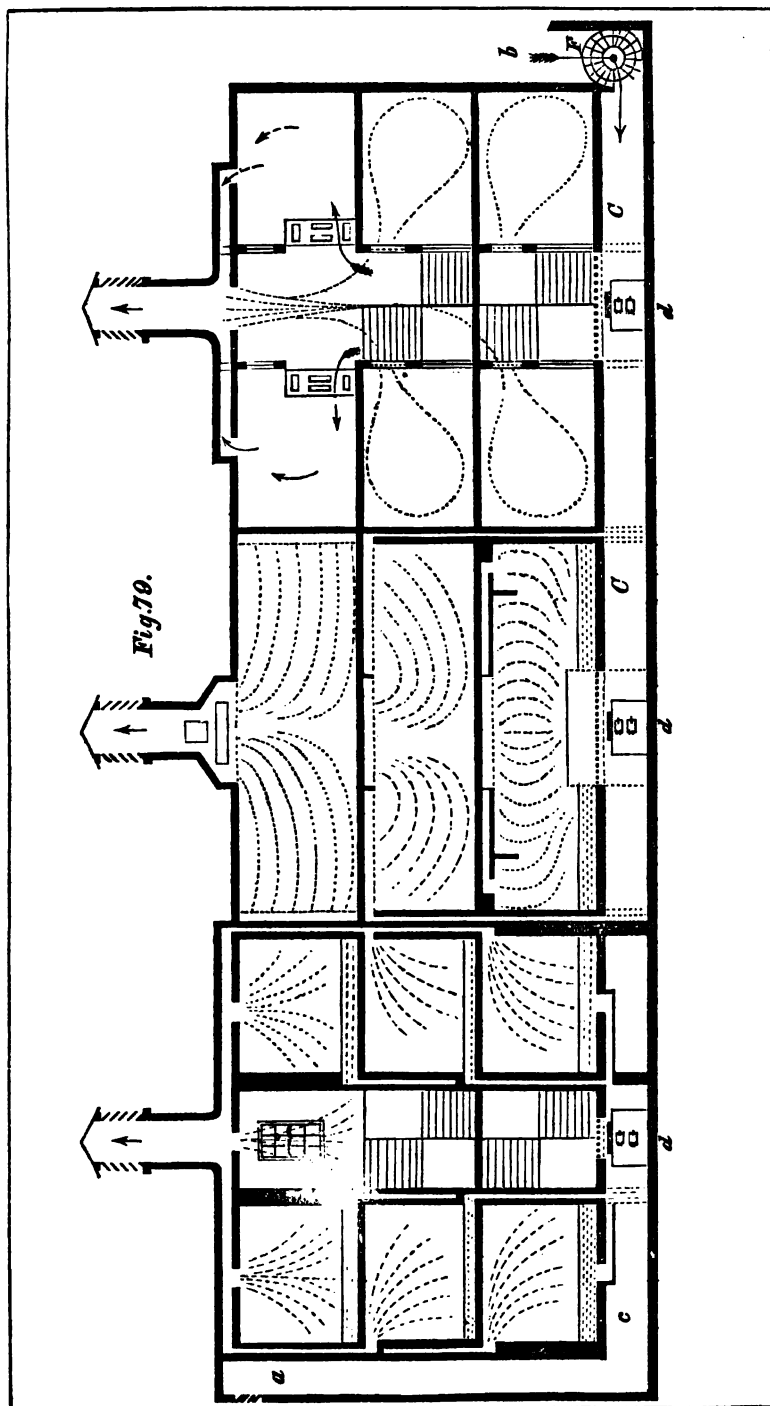
and proprietors, the whole of this sum might probably have been saved, to say nothing of loss of life and loss of occupation to numbers interested, had the hotel been ventilated as had been suggested during the preceding year, and again recommended before the disease there assumed such a condition that the medical authorities deemed it indispensable that it should be closed. Even one or two hundred dollars would have removed the worst evils arising from the drains at the moment, by discharging the gaseous products from them by an independent channel, till the greater and general evil proceeding from obstructed sewers could have been removed. Can a more striking example be found of the importance of hygiene and the chemistry of daily life being made subjects of elementary study in all schools, public or private? Those most largely interested were not impressed with the importance of the ventilation previously recommended, till it was too late to attempt to keep the hotel open longer at the period mentioned.

The improvement of numerous hotels has been very marked in recent years in the great majority of modern cities; but an instance such as the National Hotel at Washington has presented, and the results of the inquiries instituted on this subject, point out emphatically how much is yet to be done in improving the hygiene of cities as well as of individual habitations. Nor have such inquiries a local importance alone; it would be difficult to select any cities without finding some hotels presenting parallel evils, arising from drains and sewers, however inferior generally in point of intensity.

If the ordinary condition of the atmosphere at Paris be examined, of the air on the banks of the Thames at London, or over a large portion of Berlin, abundant evidence will be obtained of the effect of causes that have been increasing for ages in deteriorating the atmosphere of these capitals. The most Herculean labors, as well as the expenditure of millions, can alone place them in that position which, with the aid of public opinion and of parliamentary and municipal authority, they may at last attain.

There are few remarks in the preceding chapters that do not apply to hotels as well as other buildings, particularly those on ventilating shafts, lighting, heating, and cooling, and the details as to the ingress and egress of air at entrances, passages, stairs, and individual apartments.

The accompanying Fig. 79 explains the general suite of arrangements which it is desirable to introduce in crowded hotels. Air, from the least objectionable source, is conveyed by one or two channels, *a* and *b*, to general reservoirs or distributing channels *c*, *c*. Steam,



stove, or hot-water apparatus, *d, d, d*, gives heat there, particularly to the large central apartments indicated by the flues on the left proceeding to them.

Some of the apartments on the right, not admitting the introduction of specific flues, are provided with internal windows that enable each room to be supplied from the staircase, and also to discharge vitiated air into it. Two rooms above them receive air by the door, and discharge vitiated air directly by the ceiling.

In the large central apartments that are approached by corridors looking into the interior of an open quadrangle, great diffusion is given to the entering air, as they are often very crowded, and it is therefore necessary that the influx of the air, though well warmed, should be mild and gentle. The rest of the building is ventilated by a shaft similar to that shown by Fig. 10, constructed principally to control the atmosphere of the basement, the kitchen, closets, and a few apartments in the vicinity.

The bedrooms generally have not received any special ventilation. All are provided with fire-places.

In building a new hotel, every apartment whatsoever can easily have some ventilation introduced, when the whole arrangements are placed on a uniform system. In existing hotels where the ventilation is defective, the great object is, in general, to supply the passages with a proper atmosphere, and remove the vitiated air and emanations from gas-lights in these passages and in individual rooms.

In hotels the introduction of machinery for the movement of air is not necessary, though there are many cases where an engine is maintained in action, for pumping water and other purposes, where it could often be used advantageously. In such instances, the fanner is usually made to force fresh air into a larger channel, as indicated on the right in Fig. 79—branches from this source being distributed to passages and individual apartments, as illustrated in Fig. 80.

In using a fanner, the diffusion given in crowded apartments should be still more carefully carried out than where a ventilating shaft is used, though desirable in all cases in proportion to the numbers likely to crowd upon a given area. In Fig. 79, in the central portion, and on the left, various modes of giving diffusion are shown: according to these, the air enters principally at the side, or at the ceiling, so as not to encroach at all, or only as slightly as possible, on the floor.

Fanners may be used in the same manner as shafts for the removal of vitiated air, instead of effecting this object by the propulsion of fresh air," &c., &c.

III. WILLIAM CHANNING WOODBRIDGE

BY W. A. ALCOTT, M. D.

WILLIAM CHANNING WOODBRIDGE was born in Medford, Mass., December 18th, 1794. His father was Rev. William Woodbridge, whose name is identified with the early history of female education in Connecticut. His mother, Ann Channing, was a sister of the father of the late Rev. Dr. W. E. Channing of Boston. She died when her son was about fourteen; but his father lived to an advanced age.

The family removed from Medford to Middletown, Connecticut, in 1798, where the father took an active interest in the improvement of common schools, and organized the first Association of Teachers in this country. Here in 1799, the son learned his alphabet: and immediately commenced the study of Latin, read Accidence and Cordearius. In 1801, the family having removed to Norwich, he studied Latin there with W. McGee. His father subsequently removed to Newark, New Jersey, to take charge of a female seminary; where, in 1804, we find the son studying the Greek Testament. In 1806 he studied mathematics and chemistry; and Homer in 1807. He entered freshman at Yale College, June, 1808, at the age of thirteen years and six months. I am careful to give particulars, to show their connection with that feeble constitution which caused him so much suffering in after life. From the fact of this premature development and exercise of his mind, and from his own statements and my personal knowledge, I have no doubt of the existence, at this period, of what medical men call "latent scrofula;" nor that the tendency was greatly aggravated by his premature studies. For though his parents were wise enough to defer his "alphabet" to his fifth year, yet such was his aptitude for study, and such his advantages, under his father's home teaching, and in the sick chamber of his mother, as well as with other excellent teachers, that we see him entering college at an immature age, and with a delicacy of constitution which, while it promised him college honors, did not augur well for his general health. Perhaps the worst feature of this hot-house education, was, after all, his being so much in his mother's sick room. Such confinement may, indeed, have had a good moral influence on him, but must have con-

tributed not a little to his after physical sufferings, as well as detracted from his general usefulness.

Of Mr. Woodbridge's college life not much is known. His account of himself during that dangerous period is in some few particulars different from what might have been expected by those who know the manner of his early training and his general inoffensiveness. Yet, although those of his peculiar defective physical organization are, in some respects, unusually exposed to the besetments of vice, still their moral principles and powers are often proportionately forward. Thus it was with Mr. Woodbridge. He passed the fiery ordeal wholly unscathed.

Although it does not clearly appear that at this early stage of his educational life, he regarded every thing in the shape of amusement, whether public or private, as absolutely and unqualifiedly sinful; yet he certainly had less of sympathy with those of his years, than with the middle-aged and the old. The sick room education, to which he had been so much subjected, may have imparted a premature solidity to his habits of mind, if not a sluggish cast to those of his body.

Mr. Woodbridge graduated at New Haven, September, 1811, when he was less than seventeen years old. The subsequent winter was spent in Philadelphia, pursuing his studies; but of their particular character, at this time, nothing remains except the following extract from his private journal. "The study of the Bible in the original language, enters into my plan of study. My own inclination is to pursue a course of Biblical criticism, Ecclesiastical History, and Doctrinal Theology, as my great object; but to connect it with a revival of my collegiate studies, particularly the Mathematics and Philosophy."

He took the charge of Burlington Academy, in New Jersey, in July, 1812; where he remained until November, 1814. Of his success in teaching we know nothing; but the bare fact that he commenced at the immature age of seventeen and a half, and continued here almost two years and a half, together with his well-known subsequent success in Hartford and elsewhere, is the best evidence we can desire in his favor.

During the winter of 1814-15, we find him again at New Haven, attending lectures on Anatomy, Chemistry, Philosophy, &c. His great desire to perfect his knowledge of these and his other college studies had probably led to this change, and induced him to defer teaching at least as a profession, for a few years longer, or, more probably forever.

Mention is made, in his private journal, of a very interesting revival of religion, during this season, in Yale College; and we are led to

infer that he was himself one of its subjects, as were also many others whose names have since been well and favorably known to the Christian public; not a few of whom have gone to their final award. Such, at least, were Codman, Cornelius, and Nettleton. Mr. Woodbridge made a public profession of religion by uniting with the college church, April 2d, 1815. He was now in his twenty-first year.

In September of the same year, he commenced a course of theological study with Dr. Dwight, then President of Yale College; where he remained till the death of his teacher, which happened January 11th, 1817. In July of this year, he entered the Theological Seminary at Princeton, New Jersey. At this time, and probably from the beginning his studies with Dr. Dwight, (if not indeed from a somewhat earlier period,) he had cherished the hope of being a foreign missionary. But he had not been long at Princeton before a new field was opened to him. There was a call on him to join Messrs. Gallaudet and Le Clerc of Hartford, in conducting the American Asylum for the Deaf and Dumb,—then in its incipient stage of existence. Under date of August 30th, 1817, he thus says of himself:

“During the week, my attention has been almost constantly occupied with the subject of the asylum. At times my heart as been affected and enlarged. I felt at one time particularly, as if I could rely on the promise: “Acknowledge Him in all thy ways, and He shall direct thy paths.” I felt as if I could put myself in the hands of God; yet I must expect his guidance in the use of means.”

Having occasion to spend a night about this time, in a family where there was a deaf and dumb girl, the conversation readily turned on the susceptibility of deaf mutes for receiving instruction. To gratify the anxious parents, as well as to make an important experiment, he undertook to explain to her the word *think*, as being equivalent to seeing absent objects. She seemed much interested, and appeared to partially understand him.

The question, both with himself and his friends, was now, it would seem, that of the comparative importance of this work of teaching, and that of foreign missions. His views and final decision may be gathered from the following record in his journal, and deserves our particular attention.

“This is missionary ground. It is carrying the gospel to those who can not otherwise obtain it; yet compared with the opening among the heathen, the asylum offers a very limited field. This is an immediate, certain field of usefulness. A mission is distant and uncertain.”

In short, he concluded to join the asylum, and went to Hartford for that purpose, December 4th, 1817. The pupils welcomed him

with great cordiality, as they had probably heard of his trials on their account, and knew his general reputation and character; and in order to testify their high gratification, many of them spelled the word "glad" on their fingers.

In November, 1818, less than a year afterward, he received a pressing invitation to become professor of chemistry in William and Mary College, in Virginia. The salary proposed was much larger than he had hitherto been accustomed to receive. But after consulting with the directors of the asylum, and with God and his own conscience, he declined the appointment. This I regard as a triumph of principle, which did him much honor. It proved, moreover, to be the turning point of his life.

Though his duties were sufficiently arduous and numerous at the asylum, he sometimes preached on the Sabbath—in general, I believe, gratuitously—in various places in and about Hartford. He had been licensed to preach by the North Association of Connecticut, February 2d, 1819.

This attempt to go beyond the field which Divine Providence had opened for him at the asylum, was doubtless an error; though Mr. Woodbridge is not the first good man who has broken himself down by endeavoring to do too much. But he had been admonished already. Constitutional feebleness, to say nothing of dyspeptic and nervous tendencies, had been a serious interruption to his theological studies; and had not been without influence in the decision of the great question whether or not he should become a foreign missionary.

In the progress of the summer of 1820, his health began to give way so as in a great measure to unfit him for his duties. It should be observed, however, that in addition to his ordinary routine of labor in the asylum, and such other extra duties as from his great conscientiousness, he may have been led to engage in, some of which I have already mentioned, it is highly probable he had begun, before this time, the preparation of his *Rudiments of Geography*. For though nothing is said, in his journal, which would lead to this conclusion, yet we know that as early as in the beginning of the year 1822 this work was finished, and considerable progress made with the larger work, the *Universal Geography*.

They who know any thing about the preparation of an elementary school-book on a science which they are teaching as enthusiastically as Mr. Woodbridge taught geography to deaf mutes in Hartford, will understand the exhaustion which accompanies it, and will not be surprised that his health materially suffered. In fact he was so far reduced, that by about the middle of the year 1820, both he and

his friends were much alarmed for his safety; and, together with his medical counselors, were urging a voyage to Europe, as the most probable means of his restoration. In October, 1820, he accordingly sailed for the south of Europe. A gentleman who accompanied him on this voyage, thus says of him:

"In the intervals of a severe and depressing dyspeptic disorder, he displayed his devotion to the conscientious and philanthropic course which he afterward adopted, in the spirit of a missionary; often directing conversation to subjects which he afterward prosecuted to a great degree. He was one of the first passengers then known, who had attempted to practice religious services at sea. Among others of his experiments that might be mentioned, while crossing from Gibraltar to Algeiras, he once engaged a motley company of Spaniards, Moors, &c., in an animated and interesting conversation in the language of natural signs."

In this first voyage to Europe, and in efforts there for the recovery of his health, he spent about eight months. During this time he was in Palermo, Naples, Leghorn, Rome, and other Italian cities; and although amid scenes of war and confusion, he not only gained in health, but accumulated much geographical knowledge; an object which he had no doubt kept in view from the very first conception of the journey.

Mr. Woodbridge returned to Hartford July 4th, 1821, with his health partially restored. The autumn appears to have been spent in perfecting his *Rudiments of Geography*, and in completing the *Universal Geography*; which last was published in 1824. To these two great works he devoted his whole physical and mental energies for more than two years.

The friends of education who read this sketch, hardly need be told that up to this period, geography as a science, had received but little attention in the public schools of New England; with the exception of a few more favored of the larger schools, spelling, reading, and writing, were nearly all the branches that received special attention. A little arithmetic was taught here and there, but even this was for the most part crowded into the evening. The master, as parents supposed, had no time for it by day, without interfering with his other studies; and they sometimes formally and sagely voted "cyphering" out of the school. As for geography, some few schools studied Morse; a few others used as a sort of reading book, Nathaniel Dwight's "System of Geography," which was arranged in the form of question and answer. The vast majority, however, paid no attention whatever to the subject.

But, Mr. Woodbridge, while instructing the deaf mutes at Hartford, and perhaps yet earlier had hit upon an improved plan of teaching, which is now too well known, as incorporated into most of our school geographies, to need description. A similar method, had also been pursued by Mrs. Emma Willard of the Troy Female Seminary. Both these teachers were preparing their plans of teaching for publication, unknown to each other; but Mrs. Willard was at length induced to merge her own work in that of Mr. Woodbridge.

Woodbridge & Willard's Geographies produced a revolution in the method of teaching this useful science, wherever it had been taught before; and by their simple and interesting system of classification, were a means of introducing this science in many schools where it had not then been taught. And if others have reaped a large measure of the pecuniary emolument to which these authors seem to have been justly entitled, it is a thing by no means new or unheard of. It is but the fate of most discoverers. Some men, it is true, meet it with more resolution than others, according, in fact, to their various force of bodily constitution. Yet if Columbus, with his gigantic mental and physical energies, was so broken down by it, that his hair was white at thirty years of age, it should hardly excite surprise in any who know how feeble Mr. Woodbridge was at that time to learn, that his health was not a little impaired by the ill treatment which he received at the hands of his cotemporaries. It is certainly true that some of the works which were regarded by many as being stolen from Woodbridge & Willard, contained sundry improvements, but this was to have been expected. It must be a consolation, however, to his friends, at the present day, to know that his works still have an existence, and are regarded by not a few teachers, as preferable to any of their successors. It is also a still greater consolation to believe that the study and preparation of these works, led to his subsequent efforts in educational improvement.

In April, 1824, he thus writes: "My geography is nearly completed, and it becomes a serious question what course I shall now pursue." Unfitted as he was by ill health for teaching and the pulpit, it is not to be wondered at that such a question should arise in his mind; nor that he should think seriously of visiting England, Scotland, France, Germany, and Switzerland, with the view of improving himself in the science of general education, and particularly in his favorite department, that of geography.

It was not so common in those days to try to run away from dyspepsia as it now is; and yet such things had occasionally been done. Mr. Woodbridge's partial success in visiting the south of Europe, had

encouraged him, and raised the hopes of his medical advisers. They recommended another European voyage. Their prescription was not without its charms. It would give him a fine opportunity, among other things, to hold converse with many wise men, not only in Great Britain, but on the continent. It would also enable him to visit schools, and perfect himself in the great work of educational reform which it is believed he had already dared to meditate.

The first year of his absence, during which his health was comparatively good, was spent in arranging for the publication of his small geography in London, and in securing means of supporting himself; he also succeeded in introducing improvements into the instruction of two of the deaf and dumb institutions of England. In the autumn of 1825, a relapse into ill health obliged him to seek southern Europe. Here he grew strong again; and besides traveling again in France and Italy, he spent three months at Hofwyl, by invitation of M. de Fellenberg, as visitor and instructor. Here his health failed once more, and he went to Paris, January 1827, to correct a new edition of his large geography. He accomplished this work with some difficulty, owing to his declining strength. He gradually gave up the use of animal food, and adopted a spare diet almost entirely farinaceous. In October he went to Rome for the winter, traveling very slowly, and being forced by an attack of lumbago to stop at a private hospital at Lyons, where he grew comparatively well again, and proceeded to Rome in December. In July of 1828, he proceeded again to Switzerland, where he remained at Hofwyl, studying the system of Pestalozzi, until May, 1829. He then went to Frankfort, remained there studying the school institutions of southern Germany until July, proceeded to Brussels to investigate Jacotot's system, and reached Paris at the beginning of August, much better than when he had departed thence.

In the autumn of 1829 he sailed from Havre for New York; having been the first American geographer to travel abroad for the sake of collecting materials to enrich his works; and having made many valuable acquaintances both in England and on the continent, including Lord Brougham, Lady Byron, Dr. Chalmers, Dr. Andrew Thompson, M. de Fellenberg, Baron Humboldt, Pestalozzi, &c.

Besides the labor which he bestowed upon his geographical investigations, he was also intent upon obtaining such a knowledge of the general state of education as would enable him to devote himself to its improvements at home, amid a multitude of difficulties both on account of ill health, and a want of pecuniary resources, such as would have deterred and discouraged most men.

Soon after his return to this country, he visited Hartford, for the purpose of rousing the attention of such men as the Rev. Mr. Gallaudet, Hon. Henry L. Ellsworth, Dr. John L. Comstock, and the teachers of the American Asylum, to the great importance of improving the condition of education, especially common education, in this country. Indeed, from various remarks made by him soon after I first met him, in the spring of 1830, I am inclined to the opinion that he was not wholly without the hope of enlisting the friends of education at the asylum and elsewhere, in a scheme to establish a school for teachers in Hartford; and perhaps of finding among the men of wealth in that city a second Fellenberg. But his ill health was an insurmountable barrier to any decisive results, as well as to that speedy return to Europe, which he had been meditating. The latter project he at length wholly relinquished. He probably found the improvement of his geographies, in order to keep pace with the advances of the science, would be likely to require all his bodily and mental energies, as well as all his pecuniary resources.

For educational efforts, however, the time was interesting and auspicious. During Mr. Woodbridge's absence in Europe, beginning with about the year 1825, that movement had arisen among the friends of education in the United States, of which Mr. Gallaudet's newspaper articles advocating special training for common school teachers; the early efforts of Hawley Olmstead, Rev. Samuel J. May, Hon. R. M. Sherman, A. F. Wilcox, Josiah Holbrook, A. Bronson Alcott, and William A. Alcott, in Connecticut; the organization of the Hartford Society for the Improvement of Common Schools; the early writings of James G. Carter, Rev. S. R. Hall, and others in Massachusetts; and the publication of the American Journal of Education, by William Russell, were parts and active stimulants.

The Society for the Improvement of Common Schools held several meetings at Hartford and New Haven, soon after Mr. Woodbridge's return; and so far as his health permitted, he exerted in them an active influence. At some of these meetings, it fell to the lot of the writer of this article to lecture on improvements in the construction of school houses, and kindred topics. The lecture on school houses was afterward sent to the American Institute of Instruction, and in 1830 a prize was awarded to it. The interest Mr. Woodbridge took in the subject and in the manner of treating it, resulted in an intimate acquaintance, and in a conjunction as friends of the same cause.

Another fact deserves to be mentioned. It has already been stated that the father of Mr. Woodbridge was a teacher. He was connect-

ed with several of the earliest female schools in New England and New Jersey. Indeed, he continued a teacher for fifty years of his lifetime, and died in the harness, as is believed, from excessive labors both in school and in the pulpit, when he was between seventy and eighty years of age. But what is most to our present purpose is the fact that he was President of the first School Association, in Middlesex county, Connecticut, as early as the year 1799; the object of which was the accomplishment of the same ends at which his son and his associates were aiming thirty years later. It is not needful to insist, in this case, on the doctrine of the hereditary descent of mental and moral qualities; but it is certainly a singular coincidence. The interest which very naturally attaches to this fact is increased when it is understood that at the very juncture of which I am now speaking, the elder Mr. Woodbridge joined his son at Hartford, and became, for a considerable time a fellow laborer in a cause which he still loved with all his youthful ardor.

Our united and separated efforts in behalf of education had enlisted a good deal of newspaper influence in this cause, especially at Hartford. But having become fatigued with this form of labor, I made known to Mr. Woodbridge my intention of establishing a periodical at Hartford, to be devoted to the cause that so much engrossed our attention. But there were difficulties in the way; and in the meantime Mr. Woodbridge purchased the American Journal of Education at Boston, changed the name to *Annals of Education*, and with the aid of his father and myself, and the promise of other occasional assistance, proceeded to act as its editor. This was in August, 1831. Later in the year he removed to Boston, whither he was soon followed by his associates.

No pains or expense were spared by Mr. Woodbridge or his associates, to render the *Annals* the one thing needful to the friends of education, especially to teachers. During the first and second years of its existence, he developed, in a clear, careful, and faithful manner, the whole system of Fellenberg; together with such other systems of distinguished European educators as were meritorious, particularly those of Pestalozzi at Yverdun, and Prof. Jacotot of Louvain; while his associates and contributors furnished most of the other articles. Physical education and methods of instruction, whether practical lessons, reviews, notices, &c., fell largely to the share of the writer.

Not only the *Annals of Education*, but the *Juvenile Rambler*, was started by Mr. Woodbridge, about the end of the year 1831, on his arrival at Boston. The last was a small weekly newspaper for chil-

dren, designed not only for the family, but for the school-room, and even as a class-book for reading exercises. For a little while and in particular localities, it was exceedingly popular. A few large schools received it by hundreds; and in one or two it became a substitute for all other reading books. But it was not very long lived. Its editors,—who had charge of it practically,—found their duties too arduous, and withal so poorly rewarded, that after the lapse of two years they were obliged to abandon it, and concentrate their influence on the "Annals."

It should also be remembered that during the first years of the "Annals," a weekly paper for teachers, entitled the Education Reporter was issued for a time, by Rev. Asa Rand. But this, too, proving unprofitable, and being supposed to conflict with the Annals, was at length purchased by Mr. Woodbridge, and after being published by him for some time, in an independent form, was merged in the monthly journal.

Besides, the original cost of the list of subscribers was a heavy bill of expense. For, though it was well received by the teachers of private seminaries and a few professional men, who respected the zeal, talent, and philanthropy of the editor, yet a large proportion of the teachers of the district schools regarded it as too high—or rather too learned for them; besides they thought they could hardly spare three dollars a year of their scanty wages for twelve prosy numbers of a journal of education. The result was, therefore, that though every body praised the work, nearly every body excused themselves from taking it, especially those who most needed its assistance.

But Mr. Woodbridge, did not shrink from the responsibilities he had incurred on account of the difficulties. He devoted himself to his task with all the energy which dyspepsia would permit, though at the end of every year deeply in debt.

He continued the Annals to the close of 1836, when failing health compelled him to make a third voyage to Europe. He embarked in October, and for two years continued to act as foreign editor. After that time, except for an occasional contribution, the work was wholly in the hands of the writer. Mr. Woodbridge's pecuniary sacrifices for the Annals, during the six years and a half of its life, amounted to many thousand dollars.

In November, 1832, he had married Miss Reed, an assistant in Miss Beecher's school at Hartford; whose zeal for education was scarcely exceeded by his own, and who was an excellent helper to him in the cause. But her health was bad; and after joining him

in Europe, she died, at Frankfort, in 1840, leaving two children, a son and daughter.

Mr. Woodbridge's illness prevented him from making the educational researches in Europe which he had designed; and after spending the winter of 1840-41 at Berlin, he returned home in October, 1841. The next three winters he passed at Santa Cruz; but with steadily declining health. At his final return in 1844, it was evident that he was fast failing, and his business engagements were now made so as to provide for a speedy departure. He made a short experiment of the water cure and homeopathy at Brattleboro, but with no relief, his bodily powers being too low to rally; and in returning to Boston, entered Dr. Durkee's institution, but gradually grew worse, and died there, in November, 1845. His last days, and his death, were peaceful; though his feebleness prevented much conversation, and he scarcely said more to friends who visited him, than to remark that he supposed they met for the last time.

Although the actual results of Mr. Woodbridge's labors have been great, yet in making an estimate of him and of his work, we shall find him entitled to the credit of doing very much, under very great discouragement, if not of accomplishing results in themselves, absolutely vast and astonishing.

His mental powers were great. Both his intuitive perception of principles, and his faculty of methodically arranging facts, were rapid and thorough; and his ability to give clear expositions of the relations, bearings, and consequences of both, was remarkable. His moral endowments were, perhaps, still more eminent. His honesty, both in pecuniary matters, and in stating facts and searching authorities, was unbendingly rigid; his father was accustomed to say that in "extra corrections," made to embody the latest or most accurate matter, on his geographies alone, he had expended a good estate. He was at once frugal almost to parsimony in his personal expenditures, and liberal to nobility in assisting the educational or other benevolent enterprises in which he was interested. Except a bare support for his aged father, and a still more slender one for himself and family, he was uniformly accustomed to devote to the perfecting of the *Annals of Education*, irrespective of mere stipulations with subscribers, his whole income, from whatever source.

His aspirations, indeed, both intellectual and moral, were of the very highest order. It was the incessant prostration of his efforts by the most wretched and irritating of all diseases, dyspepsia, probably complicated with scrofula, and certainly with great nervous weakness, which prevented him from realizing those aspirations, at least to a de-

gree which would have placed his name very high on the list of benefactors to his race. This physical incapacity was in part constitutional, and was doubtless aggravated by early ill training. And it was this which forced him to relinquish one plan after another, which rendered him often a severe sufferer from small self-indulgences, which made him irritable in conversation, and which, in connection with a constitutional diffidence, and yet an unsparing honesty in expressing opinions when driven to do so, made him often seem positive or even rude in receiving or opposing the views of others.

He was always a poor man, and was too liberal in giving what came to his hand, to the objects of his life, ever to escape from the vexations and discomforts of poverty.

Yet in spite of all he accomplished much. How much influence his labors had in producing those educational changes which have been taking place in this country ever since, is not easy to say; but undoubtedly a large share of what we deem educational improvement, must be set to the credit of him and his associates. A writer of his obituary, in the "Express" of New York—the only notice of him we have ever seen—by one who well knew his whole history, thus speaks :

"With his return from his first foreign travels, we may date the commencement of the operations for the improvement of common schools in this country. For though he had before aroused much interest in Baron Fellenberg's institution at Hofwyl, in Switzerland, by the publication of a series of letters written on the spot, and which contained almost every thing that our countrymen have ever read on that subject, no considerable attempt was made to produce any general coöperation for the benefit of common education, until he made known his plans and commenced his operations.

"The American Annals of Education, which he conducted at Boston for a series of years, under many difficulties, abounded in facts and suggestions of the soundest kind; which were the groundwork as well as the exciting cause of the movements successfully made by the legislatures of different states, and the friends of education who gradually arose in all quarters of the country. The conventions of teachers and others, in counties and larger districts, owed their plans and first impulses, in a great measure to Mr. Woodbridge, as did the innumerable lyceums and other popular literary societies. He was one of the first to foresee popular opportunities to act in Massachusetts for the advantageous distribution of the money appropriated to the schools, and the most energetic, in taking measures for that purpose. At every meeting held for the promotion of this favorite

cause, he was personally present or represented by some valuable essay or other communication ; and most of the enlightened and liberal proposals offered, came from him or received his cordial support. He wrote the first letter on popular education in music, and excited and aided Messrs. Mason & Son to attempt the introduction of that important science and art on modern principles. It is needless to remark on the extent to which their example has since been followed.

"Mr. Woodbridge moved the first resolution ever offered, recommending the study of the Bible as a classic. The first Literary Convention in New York placed him at the head of a committee on that subject ; and he not only drew up, but gratuitously published and widely circulated the report, which embraces, in a most distinct and forcible manner the grand arguments in favor of that object, in a style which no man can read without admiration. No writer before or since has exceeded it ; and in all the discussions which have taken place, it would be difficult to discover any new thought or argument."

While thus engaged, through years of ill health, and all the difficulties and discouragements arising from very limited pecuniary means, Mr. Woodbridge not only found strength to perform numerous journeys, to carry on an extensive correspondence, to hold innumerable interviews with intelligent persons, and to devote money with a liberal hand for the public benefit, but his heart and hand were ever open at the calls of philanthropy. Few men, it is believed, have ever been more noble in giving, in proportion to their means.

He was as influential as any one man, in awakening and maintaining that interest in the cause of education generally, which arose in Massachusetts between the years 1830 and 1840. He was an efficient agent in drawing public attention to the necessity of normal schools. He was, if not the very first, one of the earliest writers in favor of the introduction of the studies of physiology and vocal music, into our schools. He drew from behind the counter of a country store, and introduced into the higher sphere in which he has done so great and useful a work, the celebrated Lowell Mason ; a service which alone would have made him a public benefactor. His letters in explanation of the systems and institutions of Fellenberg, besides being the first introduction, to America, of those men and their works and principles, are distinguished for clearness of style and completeness of analysis and exposition.

Besides these labors in the immediate path of his duty, he was ready and active to the uttermost of his strength, and even beyond it, in founding or conducting organizations for benevolent or educational

purposes. He was an active member of the American Lyceum; originator and conductor of the American School Society, a short-lived but well conceived association for the extension of elementary education, which failed for lack of minds congenial to his own; was connected with the Society for the relief and improvement of the African race; and was an original and interested member of the Boston Phrenological Society. He was a member of the Geographical Societies of Paris, Berlin, and Frankfort, and was a correspondent, until his death, of Pestalozzi, Humboldt, Jacotot, and many of the literary, scientific, and philanthropic men and women of Europe.

NOTES.

DAVID MARKS was a teacher in Litchfield county, Connecticut, but subsequently taught at Wethersfield, and elsewhere, in Hartford county. He had much originality of view, and was much beloved by his pupils. He was a pioneer of the period of the early labors of Gallaudet, Holbrook, Wilcox, Dr. Alcott, A. B. Alcott, &c. He removed to the West about 1830.

A. F. WILCOX was a teacher in Connecticut, of some eminence, and much originality. About 1827 he taught in the High School at Bridgeport. His Catechetical Grammar, a work of some merit, was published in 1828, at New Haven and New York. He subsequently removed to Upper Middletown, and, for a time, lectured on common school improvements in various parts of the state.

THE AMERICAN SCHOOL SOCIETY, which was formed at Boston, in 1834, grew out of a "School Agents' Society," organized at Andover, in 1832, by the influence of Rev. S. R. Hall. The former society operated by agents and circuit teachers.

The American School Society depended for efficiency mainly on the labors of Mr. Woodbridge and Dr. Alcott, who were too much occupied otherwise to continue long in its active service, and it declined and died after a few years. The meeting to organize the Society was presided over by Daniel Noyes, Esq., of Boston, and among the advocates of the plan were Professors B. B. Edwards, and E. A. Andrews. The first officers were: President, Rev. Francis Wayland, D. D.; Vice-Presidents, William Rees, Daniel Sharp, Rufus Choate, Richard Fletcher, Herman Humphrey, Thomas H. Gallaudet; among the Directors, E. A. Andrews, S. R. Hall, Rufus Anderson, Jacob Abbott, B. B. Edwards, Louis Dwight, William C. Woodbridge; Recording Secretary, W. A. Alcott; Treasurer, S. H. Walley, Jr.

IV. THE SCHLETTSTADT SCHOOL, AND JOHN REUCHLIN.

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

Louis Dringenberg. Wimpeling. Crato. Sapidus. Platter.

WE have confined ourselves thus far to the labors of North Germans and Netherlanders for the restoration of classical learning, and for the cause of popular education.

Some of the men above-noticed led, as we have seen, a migratory life as it were: Wessel, Agricola and Erasmus, all lived a longer or a shorter time in South-Germany and Switzerland, and exerted an influence upon learning there. Three places in the south became by this means centers of intellectual light, namely, Schlettstadt, Heidelberg and Tubingen. We will now consider what took place at Schlettstadt; Heidelberg and Tubingen shall receive due attention when we come to Melancthon.

Schlettstadt, a small imperial town of Lower Alsace, grown wealthy on its lucrative wine traffic, determined, about the middle of the 15th century, to found a school, and for that purpose invited the Westphalian, LOUIS DRINGENBERG, to become its first rector. He took his name from Dringenberg, his native place, a small town six miles to the east of Paderborn: he was educated at the school of the Hieronymians at Deventer. Of his method of instruction we only know this, namely, that he gave his pupils a religious training, and that, with regard to the mediæval school books, the Doctrinal, especially, though he did not venture to throw them aside, he nevertheless aimed to make them as harmless as possible. But if the tree may be known by its fruits, then the many distinguished men, who were sent forth from Dringenberg's school, are our best witnesses that his method was a good one.—He died in 1490, after having been at the head of the school for forty years.

Among his pupils the name of JACOB WIMPHELING has become the most familiar to us. He was born at Schlettstadt in 1450, and died there in 1528. At the close of his school-education, he studied at Freyburg, Basle and Erfurt. He took his master's degree at Heidelberg, in 1479, was created dean of the philosophical faculty there, and during the years 1481 and 1482 he was Rector of the university. Afterward he became a preacher at Spire, where he

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lived somewhat longer than at Heidelberg; then he went again to Heidelberg, where he read lectures upon St. Jerome, and also directed the studies of many young men, Count Wolfgang Lowenstein among the rest. To the latter he dedicated his educational treatise, entitled "*Adolescentia*," in which he gave prominence to moral precepts, illustrating and enforcing them by quotations both from the Bible and the classics. A second work, the *Isidoneus*, (ἰσιδδός, introduction,) is devoted on the other hand mainly to his method of conducting the study of the liberal arts in general, but with a special application to the classics: his "*Elegantiae majores*" and "*Elegantiarum medulla*" are school books. His epitome of German history was likewise designed for a manual of instruction.

One of Wimpheling's pupils, the distinguished James Sturm, we shall meet with again. For him it was that Wimpheling composed the essay "*De integritate*," containing rules for study and for the conduct of life, and enjoining upon him, above all things, a diligent perusal of the Bible. Some expressions in this essay, reflecting upon the monks, drew from the Augustinians demonstrations of hostility toward the author, to which, however, Pope Julius II. put an end.

Of Wimpheling's efficiency at Strasburg we shall speak in another place.* Strongly as he inveighed against the corruptions of the church, yet he did not go over to the side of the Reformation. This violent movement and schism in the church, coming as it did in his old age, accordingly occasioned him much anxiety and care.† He retired to Schlettstadt to the house of his sister, Magdalena, where he died in his seventy-eighth year.

A second scholar of Dringenberg's was George Simler, afterward Melancthon's teacher, both at Pforzheim and Tübingen; a third, Eitelwolf Stein, is known to us by his active friendship for Hutten.

Dringenberg's successor in the rectorate was Crato, (or Craft Hofmann,) who may lay claim to Beatus Rhenanus as one of his scholars. The real name of Rhenanus was BILD. He was born at Schlettstadt in 1485, and died at Strasburg in 1547. He labored much in the field of German history, wrote annotations on Tacitus, edited Vellius Paterculus, Procopius, etc.

Rhenanus continued at the Schlettstadt gymnasium under the rectorate of Crato's successor Gebwiler, and with him John Sapidus,

* Under "John Sturm."

† "In addition to other calamities, which put Wimpheling's virtue sorely to the test, this fatal division, which has extended throughout the whole church, came in, and with its superinduced weight, well nigh crushed him; he had no sympathy with this corrupt age."—*Erasmus*.

(Witz,) a nephew of Wimpheling's. This latter, born at Schlettstadt in 1490, about the year 1514, after traveling and studying at Paris, himself became Rector of the gymnasium in question.

And under his rectorate the school grew so rapidly that in 1517 it numbered no less than 900 scholars. Among these was Thomas Platter of Switzerland, whose autobiography* calls up before us a vivid picture of life and manners, as he found them at the school.

But the school did not long continue to be so full. As early as 1520 Sapidus joined himself to the reformatory movement, and in consequence became alienated from Wimpheling. And, because Schlettstadt declared decisively *against* the Reformation, Sapidus left the place and settled in Strasburg, where he was employed as a teacher in the new gymnasium, and where he died in 1561.

After a while the Schlettstadt school lost its reputation, and the Jesuits obtained control over it. The original school house is standing to this day.

JOHN REUCHLIN.

[Born at Pforzheim, Dec. 28th, 1455. Died at Stuttgart, June 30th, 1522.]

REUCHLIN'S parents were worthy and honorable people. The young John early made a marked progress in the languages and in music. Because of his good voice he was taken to the court at Baden; in 1473, when eighteen years of age, he accompanied the Margrave, Frederick of Baden, to Paris. Here he formed the acquaintance of Wessel; and here Hermonymus of Sparta gave him lessons in Greek, whereupon he studied Aristotle before all other authors, bestowing diligent study the while upon Latin.

In his twentieth year he went to Basle, there continued his Greek under the tuition of Andronicus Contoblacus, a native of Greece, at the same time reading Latin and Greek authors. At that period he also compiled a Latin dictionary, under the title "*Vocabularius breviloquus*."

He now revisited France, studied law in 1479 at Orleans, and in 1480 at Poitiers, teaching at the same time; then returned to Tubingen, married, and entered upon the active duties of the legal profession.

In the year 1482 Reuchlin accompanied Eberhard, the elder, on a journey from Wittenberg to Rome; he was selected, principally for the facility with which he spoke Latin, and for his correct pronunciation.† He delivered a most admirable speech in the presence of Sixtus

* We give extracts from Platter's Autobiography, on pages 79-90.

† When the ambassadors of the Pope met Eberhard, his chancellor replied in Eberhard's name to their greeting as follows: (mark the pronunciation!) *Celsissimus et Illustrissimus noster Princeps existit, etc.* This the Italians did not understand, and accordingly Reuchlin was called on to reply to them.—When a certain French ambassador had addressed the Emperor Maximilian in a Latin speech, the Count of Zollern replied in the emperor's behalf, but in a broad and barbarous Swabian accent. To the question of Philip, Maximilian's

IV.; and soon after, together with Eberhard, waited upon Lorenzo di Medici.

In the year 1486, Reuchlin was sent, with two other ambassadors, by Eberhard to Frankfort, to attend the coronation of Maximilian I.; and in 1489 he took charge of an embassy to Rome. During this latter journey he became acquainted with Picus Mirandola, at Florence.

In 1492, he attended Eberhard to Linz, to the court of the Emperor Frederick III., who raised Reuchlin to the rank of nobility, and created him Count Palatine. He there made a valuable acquisition, in the acquaintance of James Jehiel Loans, the emperor's physician, a learned Jew, who gave him a most careful and accurate course of instruction in Hebrew. Frederick presented Reuchlin with a Hebrew Old Testament, valued at 300 gold florins.

The excellent duke, Eberhard, the elder, died in the year 1496, and was succeeded by a profligate ruler, Eberhard, the younger. He appointed for his chancellor, Holzinger, an unprincipled Augustinian monk, who had once been arrested through Reuchlin's means. Under the government of such persons, Reuchlin had nothing but evil to look for; and hence in the beginning of the year 1497 he returned to Heidelberg, where he received a most friendly welcome at the hands of Dalberg. There he wrote *Sergius*, a satirical comedy in ridicule of Holzinger; a second comedy, which he transferred from the French, Dalberg gave to the students to act.

In the year 1498 Reuchlin was sent by the Elector-Palatine Philip on an embassy to Pope Alexander VI., before whom he delivered a Latin address. He remained a year at Rome, and took lessons in Hebrew daily of Abdias, the Jew, to whom, for every hour of instruction, he gave a gold florin: while there, he also attended the lectures of Argyropulus on Thucydides. The first time that he heard Argyropulus, this one asked him to what country he belonged, and then, whether he had paid any attention to Greek before? when Reuchlin replied, that he was from Germany, and was not wholly unacquainted with Greek, Argyropulus put a copy of Thucydides into his hands, with the request that he would read him some of it. Hereupon Reuchlin translated the Greek text very correctly and into pure Latin, so that Argyropulus cried out in admiration, "Our bereaved and exiled Greece has at last found a home beyond the Alps."

Eberhard, the younger, was formally deposed in 1498, and

son, "what sort of Latin is that?" the Wirtemberg chancellor, Lampart, replied, "that, princes, is Hechingen Latin." "Where did the count learn it?" continued Philip. "At Hechingen," said the chancellor, "a small Swabian town on the count's domains, where very coarse sackcloth is made. There the count's Latin was woven too." This incident afterward caused all such Latin to be designated by the name, Hechingen Latin.

Reuchlin returned soon after, in 1499, to Wirtemberg. From 1502 to 1513 he was one of the three judges of the Swabian league formed in 1488.

In the year 1506 he issued his "*Rudimenta Hebraicae linguae*," the fruit of his vigorously prosecuted and expensive Hebrew studies, and the means through which the Hebrew tongue was first introduced into the sphere of ordinary study. He said, that he had composed his Hebrew grammar without any assistance from others, "that so the Holy Scriptures might shed their light and healing upon the world, and our students might have wherewith to delight and to build themselves up: before me, there has been no one who has troubled himself with the attempt to set forth the whole Hebrew tongue in order in a book." In another passage he speaks of the toil and the money which the Hebrew grammar and lexicon have cost him. "To this," he says, "the invaluable worth of the Holy Scriptures was a sufficient inducement." "All the sacred writings," he says in his commentary on the seven Penitential Psalms, "both of the Old Testament and the New, I was ignorant of, as they were in their original languages; wherefore I applied myself with diligence to these, that by their help I might the better and with the more insight, discern the prophecy and its fulfillment." He wrote to Cardinal Hadrian as follows: "I gave my attention to Hebrew, because I foresaw the great service which it would bring to religion and to a true knowledge of God. All my literary labors hitherto I have shaped with reference to this end, as I shall continue to do in the future, and that with increased zeal. As a faithful follower of our Saviour, I have done what lay in my power toward the reestablishment and the exaltation of the true church of Christ."

Reuchlin fully appreciated the importance of his "*Rudimenta*," for he closed it with these words, "*Ezegi monumentum aere perennius*." And he wrote on the subject to Amerbach thus: "For if I live, then by God's help the Hebrew tongue shall be built up. And if I die, the foundation that I have laid can not be easily destroyed."

Reuchlin was brought by his Hebrew studies into very unpleasant relations both with Jews, proselytes from Judaism, and Dominicans; but the lawsuits and controversies in which he was entangled by the means were productive of at least one good result,—they hastened the coming Reformation.

In the year 1505 he published the German letter to a nobleman, on the reason why the Jews have so long been under God's displeasure. He says, "It is because they slew the true Messiah, have never ceased to defame him, and are full of hatred to Christians. Their

punishment shall endure, until they acknowledge Christ as the Messiah." "If," he says, "any among them will shew himself willing to be taught concerning the Messiah and our true faith, I will joyfully take his part and render him such aid that he need have no care for his daily bread, but may serve God in peace, and live untroubled by anxious thoughts for the future."

Thus Reuchlin pronounces a clear and correct opinion respecting the Jews, and at the same time displays a genuine Christian love, in looking to the only possible emancipation of the Jews, namely, their being grafted again into the true olive tree.

In the year 1510 commenced those memorable controversies respecting Jewish literature, which for nine years so completely engrossed Reuchlin's attention. They originated in the following manner: A converted Jew, John Pfefferkorn by name, wrote appeals to magistrates and people, urging them to a general persecution of the Jews, and also called upon the emperor in particular to suppress all their books, with the exception of the Old Testament. Reuchlin received an order from the Elector of Mentz to render a verdict in the matter. He decided to the effect, that none of the writings of the Jews should be seized and burned, save those alone which were directly aimed at Christianity;—as it had been done formerly.* This verdict drew down upon him, not merely the hatred of Pfefferkorn, but the enmity of that powerful body, the Dominicans, especially those of Cologne, with the notorious Hochstratten at their head. Sharp polemical treatises flew back and forth. It was to no purpose that the bishop of Spires, who was appointed by the Pope to adjudge the case, decided in Reuchlin's favor. The Dominicans carried the suit to Rome. But there, too, Reuchlin was about to win his cause, when Leo X. issued a "*Mandatum de supersedendo*," the effect of which was to defer the termination of the suit so long as it might please the Pope, who stood in awe of the monks.

From this time forward the monks continued to shew their hostility to Reuchlin in every conceivable manner, acting as though they had already gained their cause. But help soon came to him from many quarters. The league of the Reuchlinists, so called, was formed, which declared for Reuchlin, for classical learning and a pure church, against the perverse, corrupt monks, and their decadent, hideous scholasticism, now in its dotage. Nearly all the distinguished men

* Many singular remarks are to be found in Reuchlin's verdict; for instance, "when Christ says, 'Search the Scriptures,' (writings,) he did not mean the Old Testament, but those Rabbinical writings, from which, later, the Talmud" (this, by the way, Reuchlin had not read) "was compiled." Reuchlin's love for the Cabbala and for Jewish literature probably had some influence in determining the mildness of his verdict.

of Germany of that age joined this league; men, who afterward, almost without exception, formed a mighty intellectual power on the side of the Reformation. Ulrich Hutten and Bilibald Pirkheimer were especially active in keeping the league together, and strengthening it against the pugnacious attacks of the Dominicans.

The severest blow which the Dominican brotherhood thus received in the persons of some of its members was the publication, in the year 1517, of the famous "*Epistolae obscurorum virorum*." The probable authors of these burlesque letters are Hermann Busch, Crotus Rubianus and Wolfgang Angst; Ulrich Hutten and others may have made some subsequent additions. The letters are directed to Ortuin Gratius, to whom we have previously alluded as a scholar of Hegius, and a professor at Cologne: the purported writers are partly historical, and partly fictitious characters. The Latin is wretched, and, together with the subject-matters treated of, gives a vivid impression of the thoroughly repulsive, ignorant, profligate and villainous lives and acts of the Dominicans. And through the agency of this book the very name of Dominican became a scorn and a reproach.

At last in the year 1519 Francis von Sickingen put an end to the strife, by definitely assigning to Hochstratten and the brothers of his order one month in which to decide "whether they would for the future wholly discontinue their insolence toward his teacher, Dr. Reuchlin, 'that aged, discreet, pious and accomplished man,' and make good all the costs of court which had been put upon him; and furthermore, whether they would give him security at once and forever against all further persecutions? If not, then he, Francis von Sickingen, would carry out to the letter the original decree of Spirea, pronounced in Reuchlin's favor, that so this 'good old man might spend the remainder of his honorable life in peace.'" The monks paid Reuchlin in full, and he had no more trouble from them. So ended this long strife, and the rather also, because a far more violent warfare had commenced at Wittenberg. Thither, since 1517, had all eyes been directed.

"Praised be God," said Reuchlin, when Luther appeared on the stage; "now they have found an opponent who will give them so much to do, that for very weariness they will be forced to leave the old man to his repose." On the other hand, Luther wrote to Reuchlin, in the year 1518: "Thou wast an instrument of the divine purpose. I was one of that number, who desired to aid thee; but there was no opportunity. Yet that which was denied to me as thy comrade, will most richly come to my share as thy successor. The teeth of that Behemoth are fastening upon me, that they may, if possible,

wipe out the disgrace which they have received at thy hands. I go to encounter them with less strength of intellect and less learning than thou hast shown, but with an equally cheerful heart."

But, nevertheless, in the closing years of his life, Reuchlin did not find that settled repose, to which he had looked. For in the year 1519, a war broke out between Duke Ulrich of Wurtemberg, and the Swabian League. Ulrich was sent into exile. Sickingen, who was one of the leaders of the League, protected Reuchlin in Stuttgart. He afterwards went to Ingoldstadt, where, in 1520, he received from William, Duke of Bavaria, a salary of 200 gold-crowns, and read lectures on Hebrew Grammar, and on the Plutus of Aristophanes, to more than three hundred hearers. But he soon returned to Wurtemberg, where, however, he did not remain, but, went by invitation, to Tubingen, to teach Hebrew and Greek grammar in the university there. In the summer of 1522, he was taken sick, and died on the 30th of June, aged 67.

Reuchlin was a man of an imposing and dignified aspect; says one of his contemporaries, "of senatorial majesty." He was mild in his manners, and in the midst of trouble, anxious and timid.

He and Erasmus were the forerunners of the Reformation, of the schools as well of the church. But each, how different! How worthy appear Reuchlin's life, his labors in his country's behoof, and his holy, earnest love for the church, compared with the unloving, undevout, altogether trifling disposition of Erasmus! Reuchlin's perseverance in learning Hebrew, and the repugnance which Erasmus exhibited toward the very first rudiments of the language, are both characteristic. And to the different traits thus indicated, we may ascribe the aversions of Erasmus to mysticism, and Reuchlin's tendency toward it. This tendency is abundantly manifest in two works of Reuchlin's, namely, the "*De verbo mirifico*," and the "*De arte Cabalistica*;" in both of which he evinces a strong, spiritual affinity with Picus di Mirandola. In the dedication of the latter work,—it is addressed to Leo X.,—Reuchlin says: "Marsilius has edited Plato for Italy, John Faber Stapulensis restored Aristotle for France, and I will now make the number complete, and will give to the Germans Pythagoras, whom my labors have re-animated." If Reuchlin erred, it was the error of a mind of great depth and forecast, an error of which Erasmus was wholly incapable. And was not the spirit which stirred in Picus and Reuchlin, when as yet the world was unprepared to receive it,—was not this spirit destined sooner or later to crown the faithful and manifold labors of their many successors, in a glad and copious harvest?

Toward the conclusion of the work, "*De arte Cabalistica*," Reuchlin says: "I was the first to restore Greek to Germany, and I too was the first of all to introduce, and to deliver to the church the art and the study of Hebrew.*

As Erasmus prepared the way for the Reformers, by his version of the New Testament, so did Reuchlin by means of his Hebrew labors.

Erasmus, too, undermined the influence of the monks by ridicule. Reuchlin and the Reuchlinists did the same; but, in addition to this, they formed a positive intellectual power, a phalanx of strength, which at Luther's appearance in full spiritual armor, ranged itself under his banner, eager for the contest.†

And while the double minded Erasmus employed all the arts of a subtle sophistry to justify himself toward the Pope, Reuchlin, on the contrary, in the above mentioned dedication, came boldly before Leo X., appealing to the emperor, and to many princes, bishops and cities, to bear witness to his integrity.

RETROSPECT.

The period which we have thus far contemplated, the fifteenth century especially, may be termed a transitional period, looking back to the middle ages, and forward to the present day. For here the elements of ancient and modern times enter upon a conflict, which, increasing in intensity, at last in the first half of the 16th century, bursts out into full flame.

First in order comes the attack upon the wide-spread corruptions of the church, corruptions which had infected the whole body to the very core. This begins in Italy as early as the fourteenth century, undertaken by Dante, Petrarch, and Boccaccio, and extending down to the sixteenth century. But in Italy, alas! no Reformation results therefrom; Savonarola, to be sure, takes a step in that direction, but his aim is defeated.

Germans and Netherlanders too, from the fourteenth century on, are in various modes preparing the way for the Reformation. The Hieronymians lay bare the dissolute lives and deeds of the monks, the mendicant order chiefly, urge reform, and diffuse as far as possible, a knowledge of the Bible among the common people. Wessel observes many deficiencies in the teachings of the church, (being herein a predecessor of Luther);—Erasmus, as we have seen, undermines the

*Reuchlin's lectures upon Greek authors, delivered in 1475, at Basle, were probably the first of the kind. Rudolf Agricola, and Erasmus, together with Reuchlin, were the earliest teachers and disseminators of Greek.

† To Reuchlin's influence alone may we attribute it, that Melancthon went from Tübingen to Wittenberg; and what he did thereby directly toward the Reformation is incalculable.

prestige of the monks by means of ridicule; and the skirmish of Reuchlin and the Reuchlinists with the Dominicans, raises up a Reformatory host, well drilled for the battle.

Side by side with this conflict in the church, we have a conflict in the schools likewise, commencing with the restoration of the ancient classics. Petrarch and Boccaccio here too, take the lead in this battle of classical learning, with mediæval scholasticism. But we find in Dante both styles of culture harmoniously united. In exact proportion to an advancing sense of the beauty of classical forms, there arises an antipathy to the deformity of scholastic expressions. Many of the Italians become so enamored of the ancients, as to go over to paganism; and but very few of them bring their linguistic attainments to the interpretation of the Bible. But not so with the Germans. For these press all the knowledge that they have gained from profane writers into the service of the church. Erasmus, by his edition of the New Testament, and Reuchlin by his Hebrew labors, prepare the way for a sounder exegesis.

Thus, through the study of the original languages of the Bible, scholastic theology, previously tottering, is shivered to its foundation. The monks, however, who have grown up amid its barbarous jargon, struggle in its defense; nor can they follow the leadings of the new era, even though disposed to do it. They contend likewise for the Mediæval school books, the "*Doctrinal*," the "*Mammotrectus*," etc. And Busch, Cæsarius, and others, who are desirous to teach better things in a better way, they drive from city to city. The Dominicans, whose head quarters are at Cologne, are the chief actors in this warfare, against the men of the new school.

Those who do battle for the old order of things, are called, "theologians," and "artists;" the champions of the new culture are styled by their adversaries, "poets," and "jurists." And it is only after the victory of the Reformation in the church that classical learning obtains a complete ascendancy. Then scholasticism, which after the lapse of centuries has become a caricature, succumbs.

For the time had at length arrived, when the learned classes were to be freed from the bondage of ungainly, unmeaning, and intangible forms of thought and speech. And how enchanting must the clearness and freedom of Greek and Roman thought and imagination, and the splendor of the Greek and Roman languages, have appeared to them after their dark and gloomy imprisonment. Is it to be wondered at, that in their rapture, they neither knew nor desired any thing higher or nobler than to imitate the classics? And that it seemed to them as if now for the first time their spiritual eye were opened, their soul awakened to life, and their tongue set free?

And is it any the more to be wondered at, that in the excess of their enthusiasm for the new, they should be unjustly biased against the generations gone by, and should even go so far as to welcome every thing new, if for no other reason, simply because it *was* new?

In fact Picus di Mirandola and Erasmus were themselves, as we have seen, not slow to acknowledge that the moderns often rejected the good with the bad, and thrust aside the profoundest speculations, if they did not appear in a Ciceronian dress.

These exaggerated estimates of the "poets," are the less to be disregarded, inasmuch as they left their stamp upon the character of the next succeeding generations. It was of a piece with their exaltation of the ancients, that these men should so generally exchange their honorable German names, for those of Latin or Greek extraction; in fact, this practice is more significant than at first sight it would appear. Capnio, Melancthon, Sapidus, Brassicanus, Oecolampadius, and the like, are such names. A correspondent of Reuchlin's, who in sooth could not boast of a very euphonious name,—it was John Krachenberger,—thus writes in one of his letters: "You will recollect the request that I made you, to invent me a Greek name, which would have a more respectable look at the end of my Latin epistles, than my own, that has the look of barbarism; if you have not yet done it, I beg leave in this place to repeat my request."*

The name "poets," was probably applied to all who were so in love with mere beauty of form, as for its sake to overlook the subject and substance. And really, quite a multitude of the speeches and poems of that day consist solely of choice scraps stitched together, and are pure, unalloyed imitations. Every one who imitated the style of a classical writer with some degree of skill, was compared to such writer. Hence it was that that period was so prolific of epithets, "a second Cicero, a second Flaccus," and the like; and all faith in the possibility of becoming something better, of being one's self a first, an original, gradually died out.†

The following citation may be adduced as an extreme instance of this mania for epithets: said Trithemius, of Dalberg; "Among philosophers, he was a Plato,—among musicians, a Timotheus,—among astronomers, a Firmicus,—among mathematicians, an Archimedes,—

* From the "Clarorum virorum epistolæ ad Reuchlinum:" "There are many barbarous names among you," said Sapidus to his scholars. "These I must Latinize somewhat."

† Erasmus styled Agricola "a second Maro." Murmellius said of Lange, "*Aequiparas Flaccum lyrici modulamine cantus*;" Lange, of Busch,

"*Hinc tua dulcissimo manans elegia lepore*

A Sulmonensi nec procul ipea Chely est;"

Ulsenius, of Busch, "*Buschius antiquis non cedit jure poetis*;" Busch, of Murmellius, "*Carmine Murmelli praeis aequanda poetis*;" etc., etc.

among poets, a Virgil,—among geographers, a Strabo,—among priests, an Augustine,—and among the devout, (*cultores pietatis*), a Numa Pompilius.”

When the whole force of a generation is thrown into any new style of culture whatsoever, such abnormal outgrowths and excrescences are always most frequently to be observed.

In accordance with the demands of the new culture, the schools were metamorphosed. Lange, Hegius, Dringenburg, Busch, Wimpeling, and others, did every thing to expel the scholastic method of instruction, and to bring in the classical. But these were only the beginnings, and these teachers themselves, grown up under the old methods, were themselves merely beginners. Even the able Rector, Hegius, was compelled to learn from Agricola, the meanings of some of the Greek and Latin words, and to avail himself of Agricola's greater familiarity with syntax. It was only at a later date, and through the instrumentality chiefly of Melancthon, that the grammar schools received a thorough organization, and were provided with competent teachers and sensible text-books. The first steps toward popular education, were early taken, as we have remarked, by the Hieronymians; and there were likewise many labors in this field undertaken by benevolent individuals; such for instance, as those of Gerard Zutphen; but permanent, well-organized popular schools had no existence.* These are chiefly the work of Luther; the German Bible, the shorter German Catechism, those most important school books for the people, as well as spiritual songs in German, both for the church and the school,—all these are his work.

[While such men as those connected with the school at Schlettstadt were laboring efficiently to extend the sphere, and diffuse the light, of sound and liberal learning in Southern Germany, a similar course of improvement was in progress in the Netherlands, both northern and southern. The Reformation was soon afterward the occasion of the foundation of many schools there, in both, which were connected with the schools of the Hieronymians, and which graduated many pupils afterward celebrated. Among the peculiar features of this revival of educational enterprises were, the spread of Latin *comeores*, plays for performance by scholars, and the putting forth of various systems of facilitating study and strengthening the memory. The prevalence of wise and liberal opinions on the subject of education, is shown by the document which follows.] Ed.

* Common Schools, at least on the plan of the present day, could not have been established before the invention of printing. For the children of the peasantry could not have been taught out of manuscripts.

SCHEME OF CHRISTIAN EDUCATION, ADOPTED AT THE SYNOD OF DORT, ON THE
30TH OF NOVEMBER, 1618.

The following is the minute of the action of the Synod of Dort, held in 1618 and 1619, as matured on the 30th of November, 1618, on the Christian Education of children and youth in the family, the school and church :

In order that the Christian youth may be diligently instructed in the principles of religion, and be trained in piety, three modes of catechising should be employed. I. IN THE HOUSE, BY PARENTS. II. IN THE SCHOOLS, BY SCHOOLMASTERS. III. IN THE CHURCHES, BY MINISTERS, ELDERS, AND CATECHISTS, ESPECIALLY APPOINTED FOR THE PURPOSE. That these may diligently employ their trust, the Christian magistrates shall be requested to promote, by their authority, so sacred and necessary a work ; and all who have the oversight of churches and schools shall be required to pay special attention to this matter.

I. The office of PARENTS is diligently to instruct their children and their whole household in the principles of the Christian religion, in a manner adapted to their respective capacities ; earnestly and carefully to admonish them to the cultivation of true piety ; to engage their punctual attendance on family worship, and take them with them to the hearing of the Word of God. They should require their children to give an account of the sermons they hear, especially those on the Catechism ; assign them some chapters of Scripture to read, and certain passages to commit to memory ; and then impress and illustrate the truths contained in them in a familiar manner, adapted to the tenderness of youth. Thus they are to prepare them for being catechised in the schools, and by attendance on these to encourage them and promote their edification. Parents are to be exhorted to the faithful discharge of this duty, by the public preaching of the Word ; but specially at the ordinary period of family visitation, previous to the administration of the Lord's Supper ; and also at other times by the minister, elders, etc. Parents who profess religion, and are negligent in this work, shall be faithfully admonished by the ministers ; and, if the case requires it, they shall be censured by the Consistory, that they may be brought to the discharge of their duty.

II. SCHOOLS, in which the young shall be properly instructed in the principles of Christian doctrine, shall be instituted, not only in cities but also in towns and country places where heretofore none have existed. The Christian magistracy shall be requested that well-qualified persons may be employed and enabled to devote themselves to the service ; and especially that the children of the poor may be gratuitously instructed, and not be excluded from the benefit of the schools. In this office none shall be employed but such as are members of the Reformed Church, having certificates of an upright faith and pious life, and of being well versed in the truths of the Catechism. They are to sign a document, professing their belief in the Confession of Faith and the Heidelberg Catechism, and promising that they will give catechetical instruction to the youth in the principles of Christian truth according to the same. The schoolmasters shall instruct their scholars according to their age and capacity, at least two days in the week, not only by causing them to commit to memory, but also by instilling into their minds an acquaintance with the truths of the Catechism. [An elementary small Catechism, the Compendium, and the Heidelberg Catechism are those specified to be used by the different grades of children and youth.] The schoolmasters shall take care not only that the scholars commit these Catechisms to memory, but that they suitably understand the doctrines contained in them. For this purpose, they shall suitably explain to every one, in a manner adapted to his capacity, and frequently inquire if they understand them. The schoolmasters shall bring every one of the pupils committed to their charge to the hearing of the preached Word, and particularly the preaching on the Catechism, and require from them an account of the same.

III. In order that due knowledge may be obtained of the diligence of the schoolmasters, and the improvement of the youth, it shall be the duty of the **MASTERS, WITH AN ELDER**, and, if necessary, with a magistrate, to visit all the

schools, private as well as public, frequently, in order to excite the teachers to earnest diligence, to encourage and counsel them in the duty of catechising, and to furnish an example by questioning them, addressing them in a friendly and affectionate manner, and exciting them to early piety and diligence. If any of the schoolmasters should be found neglectful or perverse, they shall be earnestly admonished by the ministers, and, if necessary, by the Consistory, in relation to their office. The ministers, in the discharge of their public duty in the Church, shall preach on the Catechism. These sermons shall be comparatively short, and accommodated, as far as practicable, to the comprehension of children as well as adults. The labors of those ministers will be praiseworthy who diligently search out country places, and see that catechetical instruction be supplied and faithfully preserved. Experience teaches that the ordinary instruction of the Church, catechetical and other, is not sufficient for many, to instill that knowledge of the Christian religion which should, among the people of God, be well grounded; and also testifies that the living voice has very great influence; that familiar and suitable questions and answers, adapted to the apprehension of each individual, is the best mode of catechising, in order to impress the principles of religion upon the heart. It shall be the duty of a minister to go, with an elder, to all capable of instruction, and collect them in their houses, the Consistory chamber, or some other suitable place, (a number particularly of those more advanced in years,) and explain familiarly to them, the articles of the Christian faith, and catechise them according to the circumstances of their different capacities, progress, and knowledge. They shall question them on the matter of the public sermons on the Catechism. Those who desire to unite with the Church shall, three or four weeks before the administration of the Lord's Supper, be more carefully and frequently instructed, that they may be better qualified, and be more free to give a satisfactory account of their faith. The ministers shall employ diligent care to ascertain those who give any hopeful evidence of serious concern for the salvation of their soul, and invite them to them; assembling those together who have like impressions, and encouraging to friendly intercourse and free conversation with each other. These meetings shall commence with appropriate prayer and exhortation. If all this shall be done by the ministers with that cordiality, faithfulness, zeal, and discretion that become those who must give an account of the flock committed to their charge, it is not to be doubted that in a short time abundant fruit of their labors shall be found in growth in religious knowledge, and holiness of life, to the glory of God, and the prosperity of the Church of Christ.

V. SCHOOL LIFE IN THE FIFTEENTH CENTURY,

IN THE AUTOBIOGRAPHY OF THOMAS PLATTER.*

THOMAS PLATTER was born in the year 1499, near Vispach, in the Canton Valais, in Switzerland, while the bells were ringing for mass, and his kinsmen hoped from the augury that he would become a priest. In his boyhood he tended goats and kine; at the age of nine years he was sent to his uncle, who was a clergyman.

"Here," we cite from the narrative, "it fared ill with me; for he was a passionate man, and I but an awkward peasant boy. He beat me without mercy, and took me by the ears and lifted me up from the ground, until I cried like a goat when pierced by the knife of the butcher, and at many such times the neighbors in their alarm, would run in, fearing he would kill me.

"I was not long with him, for about that time there came into the place a cousin of mine, a Summermatter, who had been at the schools, [to become a priest,] at Ulm and Munich, in Bavaria; his name was Paul Summermatter. My friends spoke to him of me, and he promised them he would take me with him, and place me at school in Germany. When I heard this, I fell on my knees and prayed to God the Almighty that he would help me out of the hands of the parson, who taught me nothing at all, and beat me continually. For I had learned nothing but how to sing the "Salve" and "Um Eier," with the other scholars in the village who were under my uncle.

"When Paul was ready to go, he appointed to meet me at Skalden. Simon Summermatter, my mother's brother, who was also my guardian, lived on the road to Skalden; he gave me a gold gulden, [sixty-three cents;] this I held in my hand till I reached the town, and often looked at it on the way, to see whether I had it still with me. I gave it to Paul, and then we started on our travels. I was now obliged to forage for myself and my *Bacchant* Paul likewise; and because of my odd appearance and rustic dialect the people gave me food in plenty. Beyond the Grimsen mountains we came to an ale-house where I saw a Dutch tile stove. I had never seen one before, and as the moon shone on it, I thought it was a great calf, for I saw only two of the tiles glimmer, and they looked to me like two great

* Extracts from the "autobiography of Thomas Platter, composed in the 73d year of his age, for the instruction of his son Felix."—*Raumer's History of Education*.

eyes. In the morning I saw geese for the first time in my life; and when they hissed at me, I thought the devil had come to eat me, and I screamed and ran. At Lucerne, I first saw tile roofs, and was greatly taken with their bright red color. We came next to Zurich. There Paul waited for some comrades who were going with us to Meissen, [in present Kingdom of Saxony.] Meanwhile I had to forage to get a subsistence for Paul; and whenever I entered an ale-house, the people gathered around me to hear my Valais dialect, and were quite willing to give me food.

"After waiting eight or nine weeks for our companions, we went to Meissen, which was to me a very long journey, as I had not been used to such things, especially as I had to stop and get food on the way; there were eight or nine of us,—three little *fags*, the rest, great *Bacchants*,* as they were called; of the fags I was the smallest and the youngest. When I grew tired, and did not want to go farther, my cousin Paul came to me with a stick and lashed me on my bare legs, for I had no stockings, and worn-out shoes. I remember scarce any thing that befell us on the journey; but here is one incident. As we went along, saying all manner of things, the Bacchants told us how it was the custom in Meissen and Silesia, that the scholars stole geese and ducks, and other such game, and that nothing was done to them, if only they got out of the reach of the man who might happen to own them. One day we were not far from a village where there was a great flock of geese, without their keeper; for every village has its goose-herd, but here he was at quite a distance from the geese, with the cow-herd. Then I asked my little comrades, 'when will we reach Meissen, that I may steal geese?' They replied, 'we are there now.' Then I picked up a stone, threw it at one of the geese, and hit him on the leg; the rest flew off, but the wounded one could not keep up with them for limping. Then I took another stone and hit him on the head, and knocked him down; for when among my goats, I had had no equal in throwing, in leaping the bar, or in catching the sound of the herdsman's horn; in all such arts I was well skilled. Then I ran up, caught up the goose by the neck, whisked him under my coat, and ran down the street through the village. At that instant the goose-herd commenced running after me, and cried out to all the villagers, 'the boy has stolen my goose.' Hearing this outcry, we quickened our pace, and as I ran, the legs of the goose swung back and forth in front of me, from under my coat. The peasants too came out with clubs and gave chase to throw at us. When I saw that they were gaining upon me, I let the goose drop, and darted to

* See Note, page 90.

one side of the village amongst the thickets, but my two companions kept to the street, and two peasants after them. Then they fell down on their knees, and begged for mercy,—said they had not done it; so when the peasants found that they were not the ones who had let the goose drop, they returned and picked the goose up. But as for me, when I saw my companions thus pursued, I was in great distress of mind, and said to myself, ‘Alas! thou hast not prayed to-day, as thou wert taught to do every morning.’ When the peasants went back they found our Bacchants in the ale-house; for they had gone on before, leaving us to follow them; and they asked them to pay for the goose,—it was a matter of two *batzen* or so,—but I did not hear whether they did or no. When we came up, they laughed and asked what we had been doing; I plead in excuse, that I supposed it the custom of the country. They said it was not yet time for that.

“At a quarter of a mile from Nuremberg, our Bacchants remained behind in a village; for whenever they wished to carouse, they sent us on before. We staid at Nuremberg several weeks. Here, we little fags spent our time in singing through the streets, those who could sing, but I in foraging, and none of us went into school. This the other boys would not endure, but threatened to drag us into school. The schoolmaster, too, bade our Bacchants come to school, or they should be carried there by force. Antony, as their spokesman, refused to go. There were some Swiss there who had agreed to join us on a given day. Then we, little fags, carried stones on to the roof, but Antony and the others made a demonstration against the door. On this the schoolmaster came out with all his boys, large and small, but we flung down stones upon them, so that they were glad to retreat. The next thing we heard was, that we were summoned before the magistrate: it so happened that a neighbor of ours was about to give away his daughter in marriage. This man had a stall full of fat geese. We broke into this in the night and took out three of the geese, and decamped to the farther side of the city. Here we awaited the Swiss, who joined company with us, and we all went together to Halle, in Saxony, to the school of St. Ulrica. But our Bacchants dealt so roughly by us, that, in company with my cousin Paul, we ran away from them and came to Dresden. Here the school was not a good one, and the habitations of the scholars were full of vermin, so that we heard them in the night crawling about in the straw on which we lay. So we left the place and set out for Breslau; on the way we suffered much with hunger, so that some days we had nothing to eat but raw onions with salt, and at other times roasted acorns, crab-apples or pears, and many nights lay out under the open sky, for nowhere would they give us a

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shelter, much as we besought them; and some would even set the dogs on us. But when we came to Breslau, in Silesia, we found great abundance, and that so cheap, that the starved scholars would overeat, and many of them were very sick in consequence. Here we went first to the school of the Holy Cross, in Thum. But when we heard that in the upper parish of St. Elizabeth there were Swiss, we went thither. There were two from Bremgarten, two from Meilingen, and more, besides many Swabians; there was no distinction between Swabians and Swiss; they clanned with one another like fellow-countrymen, and stood up for one another's rights. The city of Breslau has seven parishes, and each parish its separate school, and no scholar of one parish can go into another singing or shouting, '*ad idem, ad idem,*' without causing a general uproar; the boys run together from each side and pummel each other most unmercifully. It is said there have been some thousands of Bacchants and fags in the city at a time, and all dependent on alms. They say, moreover, that some have their fags for twenty and even thirty years, who forage for them. I would often carry five or six loads home of an evening to my Bacchants to the school where they lived. The people were always very ready to give to me, because I was a little boy, and a Swiss; for they loved the Swiss, and they felt great sympathy for them, because they had fared so ill in the great Milan battle; and it was the common saying, 'now have the Swiss lost their best *pater noster*,' for before every one thought them invincible.

"I remained here some length of time, and during the winter was thrice taken sick, so that I had to go into the hospital. The scholars had their own hospital and physician. They received from the city treasury sixteen *hellers* each a week; this was ample for their support; out of it they had good attendance and a good bed, though there were many vermin, like little hemp-seed, so that I preferred, with many others, to lie on the hearth rather than in bed. The scholars were covered with vermin to an extent that was scarcely credible. As often as I wished, I could pick two or three out of my bosom. I have often, especially in the summer, gone down to the Oder, washed my shirt, hung it on the bushes to dry, and meanwhile picked the vermin off my coat, dug a pit, buried a great quantity in it, covered them up, and marked the spot with a little cross.

"In the winter the fags lay on the hearth in the school room, but the Bacchants in the cells, of which there were some hundreds at St. Elizabeth's; but in the summer, when it was hot, we lay in the church-yard; we carried the grass that was spread in the *Herren-gasse* for the houses on Saturday, made a bed of it in a good spot in the

church-yard, and there lay, like pigs in their straw. But if it rained, we ran into the school, and when there was a thunder-storm, we sang the whole night long the *Responsoria*, etc., with the *Sub-cantor*.

"Sometimes we would go of a summer evening to the ale-house to fetch beer. There they gave us full flagons of strong beer, and I often drank so much before I knew it, that I could not go back to the school again, though it was but a stone's throw from where I was. In short there was plenty to eat and drink, but not much studying.

"In the school at St. Elizabeth's nine Baccalaureates in a room read every hour. The Greek tongue had not been then introduced into the country, nor had they any printed books; only the teacher had a printed Terence. Whatever was read, had first to be written, then divided, then construed, and then explained, so that when the Bacchantes left the school, they had great thick copy-books to carry away with them."

From Breslau he went with Paul, by way of Dresden, to Munich; to a soap-boiler's. "This my master," he says, "I helped boil soap, more than I went to school; and I went about with him, through the surrounding villages, to buy ashes. Paul went to school in the parish of Our Lady, and so did I, though seldom, for I sung through the streets to procure bread, which I brought to Paul."

After fifteen years' wanderings Platter revisited with Paul his native town, Vispach. "Here," he adds, "my friends could not understand my speech. 'Our Tommy,' they said, 'talks so foreign, that no one can tell what he would have;' for while I was young, I had learned the language of every country where I had lived.

"Soon after this we went back again to Ulm: Paul took a lad with him, whose name was Hildebrand Kalbermatter, a clergyman's son, and quite young. They gave him a piece of cloth, such as is made in the place, for a coat. When we came to Ulm, Paul bade me take the cloth, and go for food. In it I brought much home; for I was well used to wheedling and begging, since to this trade the Bacchantes had from the first accustomed me, but not to go to school, and not to learn to read.

"Though I seldom went to school, and during school hours went around with the cloth, yet I suffered much from hunger; for, whatever I got, I brought to my Bacchant; I ate not a mouthful of it all, for I feared a beating. Paul had associated with him another Bacchant, named Acacius, from Mentz, and I and Hildebrand, my companion, had to provide for him too. But Hildebrand ate up every thing; so they sometimes followed him through the streets to detect him in the act, or when he came back, they would force him to rinse out his

mouth with water and spit in a basin, in order to find out whether he had been eating. And if he had, they would both together take him, throw him on the bed, cover his head with a pillow to drown his cries, and then beat him terribly. This put me in so great fear, that I brought every thing home, and we often had so much bread, that it would turn mouldy; the mouldy part they would then cut off and give to us. Many a time have I suffered bitterly from hunger and cold, when walking the streets far into midnight, singing for bread. And this puts me in mind how at Ulm there was a kind widow lady, who had two grown up daughters at home, and a son, named Paul Reling. Often in winter, when I came to her house, she wrapped my feet in a warm blanket that hung behind the stove, gave me a plate full of boiled pudding, and then bid me God speed. Often I felt the gnawings of hunger so keenly, that I would snatch the bone out of a dog's mouth, or would pick the crumbs from the crevices in the school room floor, and eat them."

At Munich Platter ran away from his Bacchantes, who had persecuted him so long, and went to Zurich.

"Here I found a fellow-townsmen of mine, named Anthony Venet, who persuaded me to go with him to Strasburg. When we arrived there, we found the place full of needy scholars, and but an indifferent school, but heard there was a good school at Schlettstadt. So we set out for the latter place, and on the way met a nobleman, who asked us where we were going. When we told him 'to Schlettstadt,' he advised us not to go, as the place swarmed with indigent scholars, and there were but few rich people there. Then my companion began to weep aloud and to ask, what we should do. I bade him keep up a good courage, 'for,' said I, 'when we get there, I am sure that one can easily shift for himself alone, and if so, I will engage to provide for us both.' As we came to an inn about a mile from Schlettstadt, I was seized with such a severe colic, that I thought I should die; I had eaten so many unripe nuts which I found under the trees. Then my companion wept again, saying if he should lose me he would not know what to do or where to go; and yet all the time he had ten crowns secreted about him, while I had not so much as a heller.

"When we arrived at the city, we found lodgings with an aged matron, whose husband was stone-blind. We then went to my beloved preceptor, John Sapidus, now deceased, and asked him to take us into his school. He inquired from what country we came, and when we replied, 'from Vispach, in Switzerland,' he said, 'they are headstrong, bad people there; they have driven all their bishops out of the land. But for you, if you will study well, you need pay me

nothing, otherwise you *shall* pay me, or I will have the very coats off from your backs." This was about the period of the revival of classical studies and the classical tongues, and in the same year that witnessed the Diet of Worms. Sapidus had nine hundred pupils, at once, some of them well-bred, learned scholars. There were there at that time Dr. Jerome Gemusaeus, and Dr. John Huber, besides many others who have since become eminent doctors and renowned men.

"When I came into the school, I knew nothing, nor could I even read Donatus, and yet I was eighteen years of age; and I sat there like a hen among the chickens. One day as Sapidus read over the names of his scholars, he said 'there are many barbarous names among you; these I must Latinize a little.' After he had finished reading, he wrote down my name, Thomas Platter, and my companion's, Antony Venet: these he changed into Thomas Platerus, and Antonius Venetus, and then said, 'let these two stand up;' when we did this, he exclaimed, 'see, there are a pair of clumsy boys, and yet what fine-sounding names they have.' This was in part true, especially of my companion, whose awkwardness was so great that I had many a laugh at his expense; for I suited myself to foreign ways and usages much more readily than he.

We remained here from autumn to Easter, and as new scholars kept continually coming, and so it grew harder to secure a livelihood, we went to Soleure. Here there was quite a good school, and more abundant provision, but there was so much time to be spent in the church, and otherwise consumed, that we resolved to return home. I remained at home a while, and went to school to a master who taught me a little writing, and I know not what else I learned. At this time I taught my little cousin, Simon Steiner, his '*a b c*,' in one day; the following year he came to me to Zurich, continued there at school, until he went to Strasburg; was Dr. Bucer's *famulus*; studied till he was appointed teacher of the third class, then of the second; was married twice, and died at Strasburg deeply lamented by the whole school."

After much change of place Platter returned to Zurich, and here went into the Frauenminster school.

"The schoolmaster's name was Master Wolfgang Kneewell; he took his degree at Paris, and while there went by the appellation '*Le Gran Diable*;' he was a man of stalwart frame and honesty of purpose, but gave little heed to the school, attending more to the pretty maidens, whose charms he could not resist. But I desired to study, for I felt there was no time to be lost.

It was soon after reported that a teacher was coming from Einsiedlin, that he had formerly been at Lucerne, was a very learned man and a faithful master, but odd in the extreme. Ther I took a seat in the corner near the teacher's chair, and thought to myself, 'here in the corner will I study or die.' When, now, the new teacher arrived and entered the school-house, he said, "This is a neat-looking place,"—it had recently been built anew—"but it seems to me the boys are an ungainly set; let them only show a diligent spirit, though, and all will be right." For my part, if my life had been at stake, I could not have declined a noun of the first declension, and yet had learned Donatus by heart. For when I was at Schlettstadt, Sapidus had with him a Baccalaureate, named George Andlow, a very learned scholar, who tormented the Bacchants so incessantly with Donatus that I thought if this is such an important book I will master it thoroughly, and so I did. And this stood me in good stead with Father Myconius. For when he came he read Terence to us, and we were obliged to decline and conjugate every word of whole comedies, he was often so severe with me that my shirt was wet with perspiration, and my sight failed me; and yet he did not give me a blow, not even with his little finger. He read, likewise in the Holy Scriptures, and at such hours many of the laity would come in to hear, for the light of the Holy Gospel was then only beginning to dawn, and men were yet burdened with interminable masses, and had idols in all the churches. But whenever he had been angry with me, he took me home with him, and gave me to eat, and after I had eaten, he would listen in delight as I told of all that had befallen me in my long and many wanderings in Germany."

Platter was afterward tutor to the two sons of Henry Werdmiller. "There they gave me every day regular meals to eat. One of the boys was named Otho; he afterward became Master of Arts at Wittenberg, and subsequently entered the service of the church at Zurich; but the other died at *Kappell*. I had no more hardships to endure; only it might have been that I applied myself too severely to study; I undertook Latin, Greek, and Hebrew, gave myself for whole nights together but little sleep, but fought resolutely against sleep, when I began to feel drowsiness, putting raw turnips, sand, or cold water into my mouth, or grinding my teeth together, etc. My good Father Myconius would caution me against such close study, nor did he rebuke me when, at times, sleep came upon me unawares. And although I had never been where I could hear lectures upon either Latin, Greek, or Hebrew grammar, yet I practiced reading by myself; for Myconius had before drilled us with frequent exercises in

the Latin grammar ; but Greek he did not pursue to any extent, for the Greek language was yet foreign, and but little used. I, however, read by myself in Lucian and Homer, as far as the vernacular version would carry me. It happened, moreover, when Father Myconius took me to live with him in his house, that he had some at his table, the now deceased Dr. Gessner was one of them, with whom I was obliged to practice Donatus and the declensions ; and this proved of great service to me. At that time, too, Myconius had for an assistant, the finished scholar Theodore Bibliander, who was thoroughly versed in the languages, the Hebrew especially, and had written a Hebrew grammar ; he likewise took his meals with Myconius. I begged him to teach me the Hebrew ; he did so, and I learned to read it both printed and written. Then I rose early in the mornings, made a fire in Myconius' room, sat by the stove, and copied off the grammar, while he slept ; nor did he ever know what I had done."

Immediately after this period Platter taught Hebrew to others, but himself learned—the ropemaker's trade. "There came," he continues, "a well-bred and learned young man from Lucerne, on his way to attend the festivities at Constance, and Zwingle and Myconius persuaded him to stop and learn the ropemaker's art with his money. After he had learned to weave and become a master workman, I begged him to teach me the trade too. He said he had no hemp. I had a small pittance left me by my deceased mother, and with that I bought the master an hundred of hemp and learned with it, as far as it went, and yet all the while took great delight in study. When my master thought me asleep, I rose up stealthily, struck a light, stepped softly, and procured his Homer, glossed my own by it, and this I kept by me while I plied my trade. He afterward learned what I had been doing, and he said to me, 'Platerus, he whose mind is on many things can do nothing well ; either study or else work at your trade !' Once, as we sat together by the water pitcher, he said, 'Platerus, what says Pindar ?' As I replied '*ἄριστον μὲν τὸ ὕδωρ*' he said, laughing ; 'then we will follow Pindar, and have no wine, but only water !'

When I had worked up the hundred of hemp, my lesson was ended, and I determined to go to Basle, which I did at Christmas."

At Basle he went to a second master of the craft, Hans Staehlin. "It was said of him, he was the crustiest master who could be found in all the Rhine valley, hence no journeyman would willingly stay with him, and there was the more room for me." When Platter worked till "the sweat ran down, then my master laughed and said ; 'had I studied as much as thou, and loved it as much, I would toss

ropemaking to the devil!" For he saw very well, that I had a special fondness for books.

The printer Cratander had presented me with an unbound copy of Plautus printed by himself in 8vo. I took one leaf at a time, fixed it upon a fork, stuck the fork underneath in the lower division of the hemp, so that as I twisted I could read alternately each side of the leaf; but when I saw the master coming, I would throw the loose hemp over it. Once he came up before I was aware, and when he saw what I was about, he flew into a passion and cursed me roundly: 'A pox light on you for your villainy, hypocritical priest that you are! Wilt study? Then go elsewhere. But if you remain with me you must work. Is it not enough that you have evenings and Fridays to yourself, but must you read the rest of the time too?' On Fridays, after breakfast was over, I would take my book, go out into the fields, and read the whole day until nightfall. By degrees I made the acquaintance of a few scholars, chiefly those who attended the instruction of Beatus Rhenanus. These and others came often to the shop, and urged me to leave off ropemaking."

At the request of Dr. Oporinus, Platter engaged to teach him Hebrew. "Oporinus nailed up on the churches a notice that there was a certain one who would read the elements of the Hebrew tongue on Monday, from 4 to 5, at St. Lienhart; there it was that Oporinus taught school. I went at the appointed hour, thinking to find Oporinus alone, for I had not seen the cards on the church doors; when lo! there were eighteen of his friends assembled, all well-bred, studious young men. When I saw them, I drew back; but Dr. Oporinus reassured me, saying they were good friends of his. I was ashamed of my shop clothes, but nevertheless yielded to his importunity, and began by reading from the grammar of Dr. Munster,—its fame had not then reached Basle;—I read to them also from the prophet Jonah as well as I was able."

Platter subsequently taught in his native town, and elsewhere, plying his trade at the same time; he was also employed as proof-reader at Basle, and sometimes, too, as a printer. He was repeatedly urged to give up printing, by Rudolph Frey among the rest, who said to him; "my friend, become a school teacher; you will thus please our rulers, and serve God and the world." He then spoke to the council, and the council delegated the town recorder, Dr. Grynaeus, to confer with me. Dr. Grynaeus said to me; 'become a school teacher; there is no more godlike office; for myself there is no station I would sooner fill.' So much was said to me that I finally consented. This was in the year 1541, on Good Friday.

The council then sent for me to meet them at the town house, and then they made an agreement with me. I stipulated, in case they should intrust the school to me to organize and direct it, for three assistants and a salary upon which I could subsist; otherwise I told them I could not conduct the school with profit and honor. This was all granted; the salary, however, with some reluctance. I desired 200 florins; 100 for myself, and 100 for my assistants. They agreed to this with the proviso, however, that I should not mention it to any one, for they had never given so much before, and they would scarcely give the like to any one who should come after me. Now everything was concluded, and the university not consulted at all in the matter, whereat they were not a little nettled; for they had desired to strike another bargain with me, and would have pledged themselves above all, in case I had subjected myself to their authority, organizing my school after the pattern they should furnish, and reading such authors alone as they should prescribe,—that they would confer a Master's Degree upon me, with other marks of their favor from time to time.

Then I went to Strasburg, intending to look into the system in operation there, and to confer with my brother Lithonius, who was teacher of the *third class* there; and then to re-arrange my school so far as the case would admit. I returned, divided my four classes; for, before, the pupils were in the lower rooms, and it had been the custom to warm no other rooms than the lower; for there had been but very few pupils. When I now began to keep school, I was obliged to lay before the university in writing, my class system, and whatever I read every hour during the whole week. This did not entirely please them; they thought I read higher authors than they in my instruction, and as for dialectics they would not suffer me to teach it at all; and they chid me so often that at last the masters began to wonder what this dialectics could be, about which there was so much strife and contention. When I explained to Herr Joder Brand, the worshipful burgomaster, at his own request, what dialectics was, he was astonished at their refusal to let me teach it. For at their convocation at Easter, they had unanimously resolved that I should not teach it any longer. But for all their interdict, I did not vary my course a hair, so long as I had pupils who wished to study the art. However, the Faculties generally were not much opposed to it, only the Faculty of arts, and they said it would revolutionize the existing systems of instruction. But the boys, nevertheless, would not give it up; for their minds were wholly set upon it. This strife lasted for some six years,

until finally a pestilence came, and my school, in consequence, was so reduced that I had no pupils who desired to learn dialectics."

The university soon after signified to him their pleasure that he should hold examinations before their delegates. "At the next Lent," he adds, "I conducted my class down to be examined in due form. But some of them so managed the matter, that they soon fell out with each other, and not being able to harmonize, they bade me undertake the examination. I said *they* must do it, for *I* had it to do every day in the school; however, I yielded, and since then have conducted these examinations myself. My opinion was, the examinations were instituted that it might be seen whether the boys made improvement or no; but those, who should hear, sat there, the most of them, and prated. The examinations are worthless; scarce a line can any one explain, and people truly say, they are only continued that the world may exclaim, "what care is given to these things!"

In the close Platter turns to his son Felix, for whom he wrote this biography, glances back upon the hardships and the poverty of his own youth time, and down through later years, when competence and fame had been allotted to him. "What shall I then say of you, Felix, of your prosperity, and the respect which is paid to you? What, but that it is God our Lord who has granted you the happiness of living so long under the fostering care of your dear mother, and the fortune of making the acquaintance of many princes and lords, noblemen and commoners. Looking at all these things, my dear son Felix, ascribe nothing of it all to your own merits, but give God alone the praise and the glory your whole life long; so shall you win the life that is everlasting. Amen."

It was in 1541, in his 42d year, that Platter took up the office of teacher; and he administered it with faithfulness and vigor for thirty-seven years, until 1578. He died, his son Felix tells us, on the 26th of January, 1582, in the full possession of his faculties, at the age of eighty-three.

NOTE.

BACCHANTS, and ABC-shooters. In the period from 1300 to 1600, when the Latin town schools first began to flourish independently of the church, many grown-up students, with more or less of university education, were accustomed to wander over all Germany, like the journeymen of the present day; stopping at one place and another to teach, and leading with them a number of boys, nominally their scholars. These students were called Bacchants, from their bacchanalian lives; and their scholars, ABC-shooters, from the rudimentary character of their studies and their chief occupation, which was, not only to study, but to steal (*Baccantice* to shoot) fowls, &c., and to beg, for the maintenance of their masters. A future article will treat somewhat more fully of these extraordinary peripatetic educators and their lives.



Engraving by J. H. Smith

Very Truly Yours

John S. Hart


JOHN S. HART

1811-1891

John S. Hart, the poet, was born in the town of Hart, N. H., on the 1st of September, 1811. He was the son of John Hart, a farmer, and Abigail Hart, a daughter of John Hart, a farmer.

He was educated in the common schools of his native town, and at the Hart School, at the same place. He was a member of the Hart School, at the same place. He was a member of the Hart School, at the same place.

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Prof. J. H. Thomas

Amherst Mass

1872

VI. JOHN S. HART,

PRINCIPAL OF THE PHILADELPHIA HIGH SCHOOL.

THE name of this gentleman is so identified with the history of the Philadelphia High School, one of the most successful of its class on the American Continent, that a brief sketch of his life has been repeatedly called for by the readers of this Journal.

JOHN SEELY HART* was born on the 28th of January, 1810, in Stockbridge township, Berkshire county, Massachusetts, on the bank of the Housatonic, at a point where there has since sprung up the enterprising little manufacturing village of Glendale.

When John was two years old, the family with several of their neighbors emigrated into what was then an unbroken wilderness, in the upper part of Luzerne county, Pennsylvania. The settlement made by these Massachusetts families, in 1812, was in Providence township, on the Lackawanna river, two miles north of where the thriving town of Scranton now stands. The subject of this memoir continued to reside in Providence until he was thirteen years old. His earliest recollections are of a log-house, in the midst of a small clearing, skirted on all sides with the primeval forest. The life of a pioneer, in the back woods, though furnishing doubtless abundant materials for romantic adventure, is yet essentially a life of hardship. Children especially, in such circumstances, often suffer severe privations. The boyhood of Mr. Hart has been described by himself as "*one continued sorrow.*"

In 1823, his father removed with the family to Laurel Run, the seat of a small mill-privilege in a wild dell about two miles from Wilkesbarre. John was then thirteen years old. He was a pale, sickly boy, with delicate features, and a general appearance of extreme physical debility. His education, so far as book-knowledge was con-

* Mr. Hart is a lineal descendant, in the eighth generation, from Stephen Hart, who came from Braintree, Essex county, England, in 1630, with the company that settled in Braintree, Massachusetts. This Stephen Hart was one of the fifty-four settlers of Cambridge, who organized a church there, and invited the Rev. Thomas Hooker from England to be their pastor. Stephen Hart went thence in 1635, with Mr. Hooker and several others, to Hartford, Connecticut, and was one of the original proprietors of that place. Thence, in 1640, he removed with others into a valley a few miles west of Hartford, and formed a settlement called Farmington, where direct descendants of the family in the male line have continued to reside ever since, upon a part of the original homestead.

cerned, was limited to an acquaintance with Webster's Spelling Book, Murray's English Reader, Daboll's Arithmetic as far as the Rule of Three, and the Bible.

Two things occurred about this time, which entirely changed his career in life. The first was the establishment of a Sunday school in the neighborhood. Two pious ladies from Philadelphia, who were spending the summer with their friends in Wilkesbarre, in connexion with a lady of the village, after exploring the wild region, known as "Laurel Run," and finding it sadly destitute of religious privileges, resolved to establish there a Sunday school. As there was no school-house, nor place of worship of any kind in the neighborhood, nor any dwelling-house at all suited to the purpose, it was determined to hold the school in a barn. The whole apparatus of this school consisted of a few boards laid across old barrels and boxes, to serve as benches, a few tracts and books which the ladies brought with them in a satchel, and the blue and red "tickets" then given as premiums for attendance. John was present the first day the school was opened, and is believed not to have been absent a day, so long as it was continued. He was assigned to the care of one of the ladies from Philadelphia, Miss Mary R. Gardiner. Besides possessing a thoroughly religious spirit, Miss Gardiner was a lady of high culture, whose gentleness and refinement of manners, and scrupulous neatness of person, contrasted strangely with the coarse materials with which she was surrounded. To this lady the boy was indebted, not only for the religious impulse, which resulted in his becoming a Christian, but for the conception of a higher style of humanity than any with which he had before come in contact. There was something within him which responded at once to what he saw so beautifully exemplified in this Christian lady, and which he thenceforth longed with an unquenchable desire to have accomplished in himself.

The other occurrence, that affected materially his subsequent career, was a dangerous and protracted illness. He was attacked with a lameness in the left knee, which proved to be the formidable disease known as "white swelling." The disease was cured, but by a painful and tedious process, and with a very narrow escape, on his part, from being lamed for life. He emerged from this illness more delicate and feeble apparently than ever. So incapable was he judged to be, for any employment requiring physical strength, that it was determined by his friends to seek for him, by some means, such additions to his stock of knowledge, that he might be able to gain a livelihood as the teacher of a country school.

Sickness, and the increased physical debility which followed it, and

which threatened to become permanent, thus changed his destination from that of a mechanic, to that of a teacher. The Sunday school in the barn, and the generous impulses there awakened, changed it still further from that of a country schoolmaster, to the position of extended usefulness to which he has since risen.

When between thirteen and fourteen years of age, he took his first lessons in what he considered the advanced sciences of Geography and English Grammar, the very names of which were till then unknown to him. So extraordinary, however, was the progress which he made in these studies, that the attention of some of the good people of Wilkesbarre was attracted towards him, and by degrees he was encouraged to hope that in some way he might obtain a regular college education. At length, in his fifteenth year, he entered the Wilkesbarre Academy and began the study of Latin. Some one gave him a Latin Grammar. Another lent him a Dictionary. He bought a Virgil with money obtained by the sale of straw hats which he had plaited with his own hands. Living in a home where even candles were a luxury, he read the story of Dido and Æneas, in the Virgil thus procured, by the light of pine-knots picked up in the woods on his way home from school. The whole of the Æneid was read by him in this manner, he himself while thus studying being obliged to lie at full length on the floor in order to get the proper benefit of the light upon the hearth.

When he first began to attend the academy, he lived at home and walked to school a distance of about two miles. Subsequently an arrangement was made by which he paid for his board in the family of a clergyman in the village, by doing sundry jobs of work mornings and evenings. The amount of work, which this sickly but stout-hearted boy undertook, in order to pay for his board while preparing for college, would hardly be believed. The particulars, as communicated to the writer of this article, have satisfied him that they were not much less in amount and laboriousness than the full work of a regular day laborer. Besides this, during the school hours, throughout his whole course in the academy, he paid for his tuition by assisting the master in hearing the lessons of the younger classes.

After a life of three years thus spent, he was found to be not only thoroughly fitted for college, but ruddy and glowing with health, his lameness all gone, and his whole man, physical, intellectual, and moral, invigorated by the stern but wholesome ordeal through which he had passed.

Mr. Hart entered the Sophomore class of Princeton College in the fall of 1827, and graduated in the fall of 1830, with the Valedictory oration and the first honor in the class for general scholarship.

About the time of completing his college course, Mr. Hart received an invitation to be the Principal of the Natchez Academy, in Mississippi. He entered upon the duties of this position in October, 1830, and remained there one academic year. Having in view, however, the preaching of the Gospel, as his ultimate profession, he returned to Princeton in the fall of 1831, and entered the Theological Seminary of that place. About a year after beginning his theological studies, he received the appointment of tutor in the college. The duties of the tutorship were discharged in connexion with attendance upon the theological classes, for the next two years.

In 1834, he was appointed adjunct Professor of Ancient Languages. A large part of the instruction of the college classes in Greek now devolved upon him, and he gave himself to the task with renewed zeal. His ardor in prosecuting the studies of his department communicated itself to the students, many of whom, besides learning the stated lessons of the day, attended voluntarily at extra hours to the prelections of the professor upon authors not included in the college course. He read in this way, to a select class of students, a large portion of the Attic Orators, and of the Dialogues of Plato. One of the changes in the classical course of the college, which Professor Hart was mainly instrumental in bringing about, was the substitution of entire treatises, such as the "Memorabilia," the "Anabasis," the "Oration on the Crown," &c., in the place of the fragmentary Collectanea formerly in use.

While engaging with so much zeal in the prosecution of the Greek, Mr. Hart gave considerable attention also to Oriental studies, particularly to the Hebrew, and the Arabic, the latter of which he studied privately under the tuition of Professor J. Addison Alexander.

Mr. Hart was licensed to preach by the Presbytery of New Brunswick, in the fall of 1835, and during the ensuing season he preached occasionally in the College Chapel and elsewhere in the neighborhood. It was his intention in due time to be ordained as a minister of the Gospel, and to remain permanently connected with the college. But in the following year, 1836, an event occurred which changed entirely his plans. This was an offer of the proprietorship and control of the Edgehill School in the neighborhood of Princeton. In the management of this institution, which was exclusively a boarding school for boys, Mr. Hart thought he saw a field of special usefulness, and with the advice of some of his friends he embarked in the undertaking. It was obvious to him, on entering upon a work of so engrossing a character, that it would preclude the idea of his entering upon the ministry. He accordingly abandoned the purpose before going to

Edgehill, and subsequently communicated this intention to the Presbytery, and returned to them his license, with a request that it should be formally cancelled, which was done. The Edgehill School, under Mr. Hart's management, became widely known, and was very successful. He continued in the management of it five years.

In September, 1842, he was elected Principal of the Central High School of Philadelphia, in the place of Professor A. D. Bache, the present Superintendent of the United States Coast Survey. The High School had been established in October, 1838, with four Professors, equal and co-ordinate, but without any Principal or official head. In consequence of this radical defect in its organization, the school was practically a failure. After a year and a half of precarious and doubtful existence, the institution was remodelled. Professor Bache became its first Principal, and continued in this office two years and a half, namely, from January, 1840, to July, 1842. Mr. Hart has been Principal since that time, or for sixteen out of the twenty years of its existence. This, then, has been his chief work. In this school alone, he has had the charge of no less than 3792 students, of ages ranging from 12 to 21; and no one who has ever been much in the school, or known anything of Mr. Hart's habits of mind, and the energy with which he pursues any favorite object, can doubt that during these sixteen years of active exertion, in his own chosen field of labor, he has left an impress upon his generation which will not soon pass away.

A leading idea with Mr. Hart, in regard to teaching, has ever been the indispensable necessity of the teacher's rousing the pupil himself to decided co-operation and activity, in order to his making acquisitions of permanent value. This idea he developed, soon after his accession to the High School, in a public Lecture to the Controllers and Teachers of the Public Schools, on the subject of "Attention." The main point which he makes in this lecture, is thus stated:—

"The subject of study, in the case of young persons, is often of less importance than the manner of study. I have been led sometimes to doubt the value of many of the inventions for facilitating the acquisition of knowledge by children. That, the acquisition of which costs little labor, will not be likely to make a deep impression, nor to remain long upon the memory. It is by labor that the mind is strengthened and grows. And while care should be taken not to overtask it, by exertions beyond its strength, yet mere occupation of the mind with useful and proper objects, is not the precise aim of education. The educator aims not to make learned boys but able men. To do this he must tax their powers. He must rouse them to manly exertion. He

must lead them to think, to discriminate, to digest what they receive, to *work*. There must every day be the glow of *hard work*—not that exhaustion and languor which arise from too protracted confinement to study—which have the same debilitating effect upon the mind that a similar process has upon the body—but vigorous and hardy labor, such as wakens the mind from its lethargy, summons up the resolution and will, and puts the whole internal man into a state of determined and positive activity. The boy, in such a case, feels that he is at work. He feels, too, that he is gaining something more than knowledge. He is gaining power. He is increasing in strength. He grapples successfully to-day, with a difficulty that would have staggered him yesterday. Every hour so spent, is an hour of conquest. There is no mistaking this process—and no matter what the subject of study, the intellectual development which it gives, is worth infinitely more than all that vague floating kind of knowledge, sometimes sought after, which seems to be imbibed from the atmosphere of the school-room, as it certainly evaporates the moment a boy enters the atmosphere of men, and of active life.”

Mr. Hart's own teaching has ever been in accordance with these views; and his class-room, whenever he is engaged directly in giving instruction, is a scene of extraordinary activity.

But the chief function of the Principal of such an institution as the High School, is not teaching. His business is rather to guide and direct the energies of others, so as out of different and sometimes discordant materials, to produce harmonious practical results. The best commentary upon Professor Hart's administrative abilities is to be found in the actual workings of the High School during the sixteen years of his presidency. The annual reports of the Controllers and the frequent descriptions of the school by intelligent foreigners, who have visited it, have made its character in this respect a matter of history. It is universally regarded as a model of efficiency.

A very striking testimony to Mr. Hart's ability as an administrator, was given by his associates, a few years after his accession to the principalship. The question of the presidency of the Girard College being then under discussion, one of the directors of that institution judging that the Professors of the High School would have a better opportunity than any persons else for being acquainted with Mr. Hart's executive ability, addressed to them a letter with a view of obtaining from them an expression of their opinion. The director received in reply a joint letter, signed by all the Professors, from which the following extracts are made:—

“The intimate relations which have existed between ourselves and

Mr. Hart, during the five years he has been Principal of the High School, have given us, as you intimate, peculiar opportunities for becoming acquainted with his qualifications. The frequent interchange of views consequent upon our official connexion, and the constant intermingling of action during five or six hours of every day, could not but result in a definite and settled opinion on the point which has been named. This opinion it would be easy for us to express in a few comprehensive terms. But as such general expressions are extremely liable to be misunderstood, we have deemed it best, even at considerable sacrifice of brevity, to state some of the particulars upon which our general opinion is founded.

"By the organization of the High School, the Principal is charged with the whole government of the institution. Every case of discipline, great or small, passes through his hands. Hence, any inefficiency in his administration, would immediately be felt by every Professor. On this point, therefore, we cannot be mistaken, and as all of us have been conversant with other institutions, prior to our connexion with the High School, we feel authorized to speak comparatively, as well as absolutely:—and we are free to say, that we have never known an institution of learning, in which the Professors and Assistants were sustained in the discharge of their duties, with so much certainty, and at the same time with such a careful regard to the rights and interests of the pupils, or where discipline was administered with so little parade, and so much real efficiency.

"There are in the High School, besides the Principal, eight Professors and two Assistants. Among so many, there must necessarily be great diversity of views and feelings. In addition to this, several of us are older than Mr. Hart, and some of us were his competitors for the situation which he now holds. We are yet free to say, that from the date of his appointment to the present time, such a thing as jarring or dissension, among the Professors, or between any of them and the Principal, has been unknown. Such entire harmony of action and feeling, for so long a time, and in the management of so important an interest as the government of nearly five hundred boys, averaging more than sixteen years of age, could not be the work of chance. We cannot err in seeing its main cause, in the conciliatory manners, the evenness of temper, the mingled firmness and moderation, which characterize the present Principal.

"Another point in the management of the school, which we have often had occasion to remark, is the rare facility of Mr. Hart, in simplifying what would otherwise be complex, in the details of administration. It is owing mainly to his remarkable powers in this respect, that without
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any increase in the number of Professors, and with an actual diminution in the annual expenses of the school, he has been enabled gradually to increase the number of pupils, to nearly double what it was at the time of his accession to the principalship, and to one-third more than it was originally supposed the school building could ever accommodate.

"In connexion with this, we would call attention to the steadiness and uniformity, which mark the movements of the institution. It argues, we think, in the Principal of the High School, no small degree of sagacity in the formation of plans, and of judicious adaptation of means to their accomplishment, that a machine so complex in its movements, and containing so many elements likely to produce discrepancy and confusion, should yet proceed from term to term, quietly working out fixed moral results, with all the certainty and precision of a mathematical problem.

"We should do manifest injustice to Mr. Hart did we not name with some degree of emphasis, his extraordinary capacity for labor. In this we refer, as well to the amount of time which he is accustomed to give daily to the business of the school, as to the amount of work which he can despatch in a given time. Both of these have often excited our surprise. Nothing but an iron will, and great physical powers of endurance, could carry a person through the exhausting labors, which we have seen Mr. Hart perform, during the past five years.

"But the feature in the character of Mr. Hart, which perhaps more frequently than any other has arrested our attention, is his fertility of resources, in cases of emergency. However excellent may be the plans for instruction and government of any large institution, yet, as in its actual operation, it is at every step dependent on voluntary agency, it is constantly liable to interruption and aberration. It is necessarily a problem, the elements of which change with every hour. Every day some new plan must be devised, some old plan must be modified, to suit a new set of circumstances. It is in these cases that Mr. Hart's talent for administration shows itself most decisively, to those who are, like ourselves, conversant with the internal economy of the school. In all the trying exigencies in which we have seen him placed, we may truly say, we have never seen him baffled, and rarely at a loss. We have not indeed known which to admire most, his fertility in the invention of means, or his instinctive sagacity in the adoption of those, that in the end proved to be successful.

"We have said nothing of his literary and scientific attainments. His character in these respects is so well known, that we have not deemed it necessary. The only point, which we would note in regard

to them, is their varied character. In philology, in mathematics, in intellectual science, in civil history, in general literature, we have found him equally and familiarly at home. This varied character of his attainments, combined with great soundness of judgment, and a remarkable balance of all the intellectual faculties, fits him peculiarly for the general superintendence of an institution intended to embrace various departments of learning and science."

Mr. Hart's position as Principal of the High School brought him into intimate connexion with the Controllers and Directors, as well as with the teachers of the lower public schools. The suggestions which he has made, from time to time, have contributed largely, not only to the gradual perfecting of the plan of the High School, but also to the general improvement of the whole system of popular education in that city.

His semi-annual examinations of the candidates for admission to the High School, are really a most searching scrutiny into the qualifications of the teachers. Besides this, he is often required to examine directly competitors for vacant situations in the public schools. The facts brought to light in these inquiries early convinced him that many of the teachers, while possessed of good abilities, were sadly deficient in many points of scholarship which were of vital importance. With a view to ascertain how far they were disposed to embrace opportunities for improvement, he undertook in the early part of 1844 to instruct a class of female teachers in the rudiments of Latin on Saturday afternoons. Beginning with about a dozen, and without any public notification, the class increased before the winter was over, to more than a hundred. Encouraged by this success, he then proposed to the Controllers that the whole of Saturday morning should be given up to the improvement of the teachers, and that they should be regularly organized into classes for this purpose, to be instructed by the Professors of the High School. The suggestion was approved, and the plan continued in successful operation for several years.

There can be no doubt that these Saturday classes gave a decided and healthy impulse to the teachers of the lower schools. They led also, by a natural and easy transition, to the establishment of the present efficient Normal School.

In promoting the interests of these classes, and in seeking to make them attractive, Mr. Hart labored with most untiring zeal. Besides taking a regular part in the instruction, in the same manner as the other professors, he prepared every week a written lecture of an hour's length, which was delivered to all the classes in a body at the close of the other exercises. The first course of lectures was on the "History of the

Public Schools of Philadelphia." In the preparation of this history, he not only explored all the annual reports, and other printed documents of the Controllers, from the year 1818 down to the date when he was writing, but actually read the entire original records of the Controllers, and of the various sectional Boards of Directors, covering more than six thousand pages of folio manuscript, noting each fact as he proceeded, item by item, digesting the information gradually into convenient tabular forms and chronological tables, and afterwards writing out the results in a continuous stream of narrative. The history, thus prepared for the purpose of creating in the minds of the teachers a local interest in their work, would make a good sized octavo volume.

After completing these lectures, Mr. Hart projected another course, still more extended and laborious, on the "History of the English Language and Literature." The admirable paper on the "English Language," which is to be found in the August number of this Journal for 1855, formed originally one of the lectures of this course. As an evidence of the thoroughness with which Mr. Hart entered into the subject, it may be remarked that these lectures, before they were suspended, had already reached the fiftieth, and he had then only come down chronologically as far as Shakspeare. Some of these lectures, as those on Chaucer and Spenser, were repeated in subsequent years to the regular classes of the High School, and elsewhere, and those on Spenser, twelve in number, were published in 1847, forming a large octavo volume of over five hundred pages.

One of the practical difficulties that beset the path of the school in the earlier stages of its history, grew out of its very prosperity. As this difficulty is one common to all similar institutions in large cities, it may be well to dwell upon it a little, and to notice briefly in what manner the problem has been solved in the case of the Philadelphia High School.

The school had grown from 68 pupils and four professors, the original number, to 500 pupils and twelve professors, which was more by 100 at least, than the building then occupied could suitably accommodate. As the population was steadily advancing, and the public schools constantly gaining in favor, thereby increasing the applicants for admission to the High School in a two-fold ratio, the question would ever and anon arise, what must be the issue of this state of things? To deny admission to those who are truly and fairly qualified must create dissatisfaction, and end in settled opposition. To establish additional High Schools, from time to time, would, besides its extreme expensiveness, break up the beautiful and harmonious uniformity and homogeneity of the whole system of public schools.

In view of this state of things, Mr. Hart, in his Annual Report, September, 1846, made the following suggestion :—

“This gradual filling up of the school, suggests a serious question for the consideration of the Controllers. The time must come, if it has not already come, when the limit will have been reached, beyond which it will be impossible to increase the number belonging to the school. The school system will continue to grow, both by the natural growth of the population, and by the continued improvement of the lower schools. The time must come, therefore, when there will be more candidates qualified for the High School, than can be admitted on the present basis. To meet this difficulty, it was at one time feared that it would be necessary to establish additional High Schools. Experience, however, seems now clearly to indicate that such a result is not, and can never be necessary. All that is necessary, is to prescribe additional studies as a qualification for admission. There are several studies pursued during the first year in the High School, which might be pursued to quite as much advantage in the last year of the grammar schools. The removal of these from the list of studies pursued in the High School, to the list of those required for admission, so far from being an injury, would possess obvious advantages. It would benefit the High School, by enabling the professors to add new studies to the course, or to carry farther some of those already adopted. It would benefit still more the grammar schools, by introducing there some very important branches of study, which are now virtually excluded from them. Reading, spelling, and writing, grammar, geography, and arithmetic, form undoubtedly the basis of a good education. Before the establishment of the High School, even these studies were not taught adequately in the grammar schools. Some of them, as it appears from the records of the Controllers, were not taught at all to any extent. A very great change has taken place in this respect during the past eight years. The second, third, and in some cases, even the fourth division of a grammar school now, are quite equal in intellectual advancement to the first division, in 1838. In consequence of the desire to gain admission to the High School, and the necessity, in order to this, of the pupils being proficient in grammar, geography, and arithmetic, it has come to pass, that these studies are now taught in our public schools as well, probably, as in any other schools in the world of the same extent. But there are many other studies, which, if not equally important with these, are still highly desirable. Every pupil of the public schools should, if practicable, be made acquainted with the History of the United States, and the general prin-

ciples of the National Government. These branches might be taught in the grammar schools, just as well as in the High School."

In consequence of this suggestion, the Controllers adopted a resolution, adding the "History of the United States" to the list of studies required for admission to the High School.

Finding that the measure adopted was still inadequate to the exigency, Mr. Hart, again, in September, 1849, brought the whole subject before the attention of the Controllers in a special report, from which the following extracts are made:—

"In several of my annual reports, and particularly in that for the year ending July, 1846 (pp. 86–88), I have called the attention of the Controllers to the necessity of providing in some way for the steady increase in the number of applicants for admission to the High School. This increase is caused by the natural growth of the population, the improvement of the lower schools, and the constant extension of the whole school system.

"When the High School was opened in 1838, the number of pupils in all the lower schools was less than 18,000. It is now more than 40,000. From a careful examination of the early records of the Controllers, and also those of the sectional Boards, I believe the lower schools have advanced in other respects quite as much as in numbers. The second, and in some cases even the third divisions of the grammar schools are now as far advanced intellectually, as the first divisions were before the organization of the High School. Yet our terms of admission have remained nominally unchanged. I say *nominally*, for there has been of necessity a real change. While we continue to examine on the same branches that we did in 1838, we ask questions that are more difficult, requiring on the part of the applicants a much more extended study of those branches.

"It will be readily perceived from the nature of these branches, that there is a certain point beyond which the course heretofore pursued in our examinations ceases to be profitable or proper. Arithmetic beyond a certain point runs by a natural sequence into algebra and mensuration, the latter consisting mainly of the practical applications of arithmetic to mechanical and commercial business, the former being only arithmetic generalized. The study of the elements of algebra and mensuration is in fact, as every well informed teacher knows, the best and shortest method of perfecting a pupil in arithmetic. After learning thoroughly the easier parts of arithmetic, the most expeditious way of learning its higher problems is, not to study them alone, but to study them in connexion with the elements of algebra and mensuration. The elements of algebra and mensuration, and the whole of

arithmetic, may thus be acquired together, in the same time that arithmetic alone would require if pursued by itself to completion. There is in like manner a natural, though not quite so intimate a connexion between writing and drawing, grammar and rhetoric, geography and history, the history of the United States and its constitution and form of government.

"The removal of some of these simpler studies from the list of those pursued in the High School to the list of those required for admission, seems therefore to be desirable in itself, as well as demanded by the increasing number of applicants. Such a change would benefit the High School, by enabling us to add new studies to the course or to pursue farther some of those already adopted. It would benefit still more the grammar schools by introducing there some very important branches now virtually excluded from them.

"Changes of the kind contemplated should be gradual and prospective in their provisions. To add suddenly a large number of studies to the requirements for admission, would tend to discourage the grammar schools by overloading them with duty, and to embarrass the High School by causing a temporary deficiency in the number of applicants. The Controllers during the last school year made a useful beginning by a resolution requiring that in all examinations subsequent to July, 1849, the candidates be examined in the History of the United States, in addition to the studies heretofore required. This addition I am sure will not be sufficient. I would therefore respectfully suggest the adoption by the Controllers of a resolution requiring candidates for the High School to be examined, in February next and at all subsequent admissions, in the Constitution of the United States; and in July next and at all admissions subsequent to that, in the elements of algebra and mensuration. I have suggested these branches in preference to some others that might be named, because they seem on the whole to be the simplest, and the ones most intimately connected with the studies already pursued in the grammar schools.

"Whether other studies shall be required, and how soon they shall be added to the list, we shall have better means of judging a year hence than now. A change of the kind contemplated can hardly fail to give a favorable impulse, which will be propagated through the whole series of lower schools.

"I should be loth to believe that important improvements are not in store for all our schools, from the High School down to the primaries. I have great confidence also in the belief that improvements hereafter are to be obtained in the same manner that all improvements heretofore have been, I mean, by a constant process of *improving*

upwards. The primaries are to be improved by elevating the secondaries, the secondaries by elevating the grammar schools, the grammar schools by elevating the High School. The whole system, in short, is to be improved by every part rising equally, gradually, and constantly. The mode of improvement which I have suggested, seems to be that which with the least action secures the largest results. As a small angle of divergence at the top of a pyramid affects materially its solid contents, so a small amount of legislation, judiciously applied to the top of our system of public schools, and addressed primarily to only four or five hundred of its pupils, may enlarge materially the intellectual advantages of its whole forty or fifty thousand."

The adoption of this line of policy by the Controllers, and the perfect ease with which the measure was carried into effect, settled entirely the question of the adequacy of the one High School to supply the wants of an ever increasing population.

The transfer of so considerable a number of studies from the High School to the grammar schools, gave a fitting opportunity for extending the course of the former. Among the studies which Mr. Hart had long wished to see placed on the footing of an integral part of an English education, was the Anglo-Saxon. In 1849 and 1850, with the consent of the Controllers, he introduced this study into the High School course, in connexion with his lectures on the early English literature. As there was no one else at hand to undertake the task of instruction, he set himself courageously to work to learn the language, in the midst of his other multiplied duties, and taught it with most gratifying success to several classes. Some prejudice, however, having been awakened in the public mind, against this study, he was obliged in 1854 to yield to the popular clamor, and to abandon the course, just as it had become fairly developed. The experiment on this subject in the Philadelphia High School, was regarded with much interest in all parts of the United States, and its very unexpected abandonment, after such a noble progress had been made, was learned by many of the most enlightened friends of education with sincere sorrow. Mr. Hart's views on this subject are set forth with so much fulness in the paper on "The English Language," before referred to, that it is not necessary to dwell upon it farther in this place.

Professor Hart has been busy with his pen. Having access to the editorial columns of nearly all the daily papers of the city, he has seldom allowed a week to pass without some contribution to the general current of public opinion. In the numerous local controversies, which have necessarily grown out of the development of a general system of popular education, he is understood to have availed himself very largely

of this means of allaying opposition, and of propagating correct views. His thorough investigation into the early history of the public schools of Philadelphia, in preparing his course of lectures on that subject, gave him rare facilities for such a purpose.

Besides these anonymous, but not least important labors, his annual reports have furnished a vast amount of statistical information of the greatest value for general educational purposes. These reports, if collected, would form several large volumes. The information which they contain, is presented with a compactness and perspicuity that have made them models of their kind.

Mr. Hart's first work in the preparation of school books was the editing of "White's Universal History," in which he added several chapters to that part relating to the discovery and settlement of North America. This was in 1843.

In 1844 he discharged the duties of editor of the Pennsylvania Common School Journal.

During the same year, he prepared and published two reading books, which have been popular, namely, "The Class Book of Poetry," and "The Class Book of Prose."

In 1845, he published two other popular school books, namely, "English Grammar," and "A Brief Exposition of the Constitution of the United States."

Mr. Hale, the philologist to the United States Exploring Expedition, under Captain Wilkes, prepared for the government a large quarto volume on the languages of Polynesia. It was a learned work, containing some fifteen or more grammars and vocabularies of the different groups of languages with which the Expedition was brought into contact. Mr. Hale being in Europe at the time his manuscript was going through the press, the difficult task of editing it was intrusted by the Government to Mr. Hart, and occupied no little of his time in the years 1845 and 1846.

In 1847, his "Essay on Spenser and the Fairy Queen," already referred to, appeared contemporaneously in New York and London. It was a sumptuous octavo, of 514 pages, and was received with marked favor. A new edition of it was issued in Philadelphia, in 1854.

The severest literary labor, which he has at any time undertaken, was the editing of Sartain's Magazine. This was a monthly periodical, established with a view to high literary excellence, and enlisting in its service writers of the first class. Its success was immediate, and for that time very great, reaching in its second year a circulation of thirty thousand. Mr. Hart, in addition to his other engagements, dis-

charged the editorial labors of this magazine for two years and a half namely, from January, 1849, to July, 1851, writing all the editorials, reading all the proofs, reading and deciding upon the manuscripts offered for publication, amounting often in a single month to enough to fill the magazine for a year, and conducting the entire correspondence with the contributors. It was his boast, on leaving the office, that he had on no occasion kept either printer, publisher, or contributor waiting for an hour.

His connexion with this magazine brought him into familiar acquaintance with most of the living writers of the country, and made comparatively easy his next task, which was a publication on the "Female Prose Writers of America." This was issued in 1851. It was a large octavo volume, of 630 pages, printed in beautiful style, embellished with portraits, and containing original biographies with extracts. The work was well received, and has been reprinted once or twice since.

His latest publication is an introductory Latin reading book, entitled "Epitome of Greek and Roman Mythology." It appeared in 1858.

During his connexion with the Philadelphia High School, Mr. Hart has had numerous offers to go elsewhere. In December, 1844, he was invited to the presidency of the Pennsylvania Institution for the Blind. He has repeatedly had overtures to become the president of a College, and once to be the Chancellor of a University, with a large increase of salary. Thus far, however, with a wise moderation, he has uniformly declined all offers of the kind.

Mr. Hart was elected a member of the American Philosophical Society in January, 1844. He received the honorary title of Doctor of Laws from Miami University in Ohio, in 1850.

For several years past, Mr. Hart has given a large amount of time and labor to the Sunday school cause. Feeling how much he is himself indebted to this beneficent agency, he endeavors to discharge some part of the obligation thereby laid upon him, by doing whatever may be in his power to extend its benefits to others. On Sunday, both morning and afternoon, he superintends a large Sabbath school, numbering fifty teachers and between three and four hundred scholars. On this school he has brought to bear all the fruits of his long experience as a professional teacher and governor of youth. Besides this, he is an active manager of the American Sunday School Union, to which he gives from two to three afternoons a week all the year round.

VIII. VALENTINE FRIEDLAND TROTZENDORF.

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

VALENTINE TROTZENDORF was the son of a farmer, Bernard Friedland by name, who lived in the village of Trotzendorf, near Górlitz. He assumed the surname Trotzendorf, in remembrance of the place of his birth.

Born in 1490, he was seven years younger than Luther, and seven older than Melancthon. The monks induced his father to send him in 1506 to the school at Górlitz; but he soon took him away, to help him at his work in the field. His mother, who greatly desired to see him a priest or a monk, persuaded the village pastor to instruct him in writing and reading. And after two years' time he went back to the Górlitz school. At his departure, his mother exhorted him to be true to the duties of the school; and in after life he considered himself bound by this exhortation, as if it were his mother's vow, to assume the office of teacher.

When in 1513 Trotzendorf's father died of the plague, he sold his paternal inheritance and moved to Leipzig, where, during two years he perfected himself in Latin under Peter Mosellanus, and learned Greek from Richard Crocus. In 1516 he became a teacher in the Górlitz school; here his fellow teachers as well as the scholars learned from him, and even the Rector took lessons in Greek from him.

Luther's appearance induced him, in 1518 to surrender his post as teacher, and to go to Wittenburg, where he remained for five years. Here he took lessons in Hebrew from a converted Jew, named Adrian. And he here formed a most intimate acquaintance with Melancthon, for whom throughout his life he continued to testify the greatest respect.

In the year 1523, Helmrich, a university friend of Trotzendorf's, was chosen Rector of the Goldberg school, and through his influence Trotzendorf was invited to become his colleague. And when in the following year, Helmrich obtained another post, Trotzendorf was made Rector in his stead. Affairs of church—the reformatory discussion of Dr. J. Hess at Breslau, in which Trotzendorf took an active part, and Schwenkfeld's evil influence in Liegnitz, against which he made a vigorous defense—would appear at that time to have stood in the way of an active prosecution of his legitimate calling.

In the year 1527 he was called to Liegnitz to a Professorship in a new university, which institution was then rather an unformed project than a perfect organization; but he left the place in 1529 and returned to Wittenburg. And now in a short time the Goldberg school was completely broken up; but at the pressing solicitation of Helmrich, who had risen to be Mayor of Goldberg, Trotzendorf, in 1531, resumed the post of Rector there, which office he filled with honor and dignity for five and twenty years. His school soon acquired an extraordinary renown. Scholars poured in upon him, not merely from Silesia, but from Austria, Styria, Carinthia, Hungary and Poland: to have had him for a teacher, was the best of recommendations.

Trotzendorf adopted quite a peculiar organization. His school was divided into six classes, and each class into tribes. The scholars too, he associated in the government with himself, by appointing some to be *Oeconomi*, others *Ephori*, and others again, *Quaestors*. The *Oeconomi* were to oversee the household arrangements, as, for example, that all should rise in the morning or retire at night at the set time, that the rooms, clothes, etc., should be kept in good order, etc. It was the duty of the *Ephori* to see that order was observed at the table. Finally, each tribe had its *Quaestor*, and all these *Quaestors* were made subject to one supreme *Quaestor*. Those were chosen weekly, this one monthly; on laying down their office they delivered Latin orations. The *Quaestors* were expected to secure a punctual attendance on lessons, to report the indolent, to give out subjects for the Latin debates customary during the half-hour after meal time.

Trotzendorf moreover established a school magistracy. This consisted of a consul chosen monthly by himself, twelve senators and two censors. Had a scholar committed any fault, he was obliged to justify himself before this Senate, and in order to do it the better, he was allowed eight days in which to prepare his plea. At the trial Trotzendorf presided as perpetual dictator. If the accused party cleared himself from the charge, he was acquitted, especially when he delivered a well framed plea; but if his speech was good for nothing in point of style, he was condemned even for a trivial misdemeanor. And Trotzendorf repeated the decree of the Senate in such cases with great solemnity, and insisted strongly on its fulfillment.

These singular regulations had the good effect of accustoming the boys early in life to have respect to the civil government. A similar tendency may be observed in the laws which Trotzendorf established in his school. In the introduction to these laws, he says: "Those men will rule conformably to the laws, who, when boys learn to obey

the laws." These school-laws are characteristic of the man. He first lays down these five principles :

1. *Tros Tyriusque mihi nullo discrimine agetur*. Here, where scholars are assembled from all countries, all must be governed equally and alike.

2. *Factus tribulus serva legem*, was a Lacedaemonian proverb. And here too must those favored by fortune as well as the base born, so long as they are scholars, conform to the laws. The pupil is no longer the nobleman.

3. According to the degree of their demerit the scholars are to be punished with the rod, the lyre,* or imprisonment. Those who, either on account of noble descent, or years, shrink from the disgrace of these punishments, must either do right and thus not come under sentence, or leave our school, and seek freedom to do as they please elsewhere. Fines are never to be imposed in any case, since they affect parents rather than children.

4. Every new comer, before being enrolled among the scholars, must first promise to obey the laws of the school.

5. The members of our school must be members likewise of our faith and our church.

The first chapter of the school-laws treats of piety. "The fear of God is the beginning of wisdom"—this is the opening sentence. A clear knowledge of Christian doctrine is required, together with prayer, church-going, confession, taking the communion, diligence and obedience ; while swearing, cursing, foul language, the practice of magic, with every superstition, are forbidden.

In regard to instruction, Trotzendorf's school agreed in the main with other schools of that period. It was based upon the customary *trivium*, grammar, logic and rhetoric.

In Trotzendorf's German School Regulations of 1548, it is laid down as the aim of his school "to prepare boys to enter upon the study of the higher faculties, as theology, medicine, philosophy, and jurisprudence." To accomplish this aim, "in the first place, grammar, inasmuch as it is the mother and nurse of all other arts, must be pursued with the most thorough-going diligence. Therewith should be combined useful readings from good authors, such as Terence or Plautus, and Cicero, the epistles and offices, chiefly. Thus boys, being guided into the Latin tongue both by rule and by example, will learn to speak Latin and to write it with equal propriety.

* The lyre, *lyra* or *fidicula*, was made of wood in the shape of a violin, and furnished with strings. Triflers were disgraced by being made to stand with this about their neck, and their hands passed through it and fastened.

Next should come reading from the poets, as Virgil, and some books of Ovid, so that the boys may comprehend metre, and learn to construct verses." "Every week there should be a common exercise in writing letters in Latin, and every week, likewise, a common theme should be versified by the whole school." The Latin school-code provides that the scholars, in these exercises, "should use no phrase before ascertaining in what author it occurs, and whether it is sufficiently elegant and appropriate;" also that "they should never use the mother tongue; but with teachers, fellow-scholars or other learned persons, speak in Latin alone." In a poetical eulogium on the Goldberg school, cited by Pinzger, we are told that "none were permitted to speak German there, so that the boys came gradually to regard their mother tongue as a foreign language." Still stronger expressions occur in a eulogium on Trotzendorf: "He had so thoroughly infused the Roman tongue into all the neighborhood, that it was deemed a disgrace to utter even a word of German; and could you have heard the Latin accents that poured from the tongues even of plough-boys and dairy-maids you would have thought 'surely Goldberg is within the borders of Latium.'"^{*}

To speak and to write Latin was the universal ideal of that era, and hence, among the authors to be read, Terence and Plautus were deemed the most important. In addition to Latin, Greek grammar and readings from Greek authors were prescribed. Logic and rhetoric were likewise classed among regular studies, as we learn from the German School Plan above cited. "Trotzendorf exercised his scholars in the art of speaking, and that of thinking likewise. Logic was never intermitted by him, and he prepared his scholars for excellence in rhetoric, by a frequent study of the speeches in Livy, and those of Cicero." Music and arithmetic are likewise named in the School Plan, though without being enlarged upon. Lectures were read, on the Sphere of Sacro Bosco, by a "*Sphaerista*," and on the principles of moral and natural philosophy, by a "*Magister*." Religious instruction was given by Trotzendorf himself, with faithfulness and solemnity, and he read with his scholars the epistles of Paul, as well as portions of the Old Testament in the original.

The instruction of the upper classes he at first took entirely upon himself, nor did he employ assistant teachers until many years had elapsed; but the lower classes he committed to the charge of older scholars.

^{*} Atque ita Romanam linguam transfudit in omnes,
Turpe ut haberetur, Teutonico ore loqui.
Audisses famulos famulasque Latina sonare,
Goldbergam in Latio crederes esse vitam.

And here we can not fail to be struck with the quite peculiar character of Trotzendorf's educational system. Schools, in general, will be found to consist of two sharply defined and distinct bodies,—teachers on the one hand, and pupils on the other. The teachers are learned, the pupils ignorant; the former impart knowledge, the latter receive it; those dictate and these obey. This sharp division, Trotzendorf rendered impossible, both in discipline and instruction. In instruction, for while he himself taught the older scholars in the higher classes, he appointed these same scholars teachers of the lower classes, that they, too, might learn by teaching. This reminds us of the monitorial system of the present day, and perhaps Trotzendorf, like Lancaster, was first led to adopt this plan from the impossibility of giving his personal attention to a large number. He found the need of scholars to aid him, both in oversight and instruction, as the resources of the school were too slender to admit of his hiring an adequate body of sub-teachers.*

But if we look more closely into this plan, it will appear not merely to have been adopted from the necessities of the case, but, at the same time to have been the organic outgrowth of a principle. Trotzendorf's school appears to have been a republic, where all the scholars, noble and obscure, were alike and unconditionally subject to the laws: he himself was *Dictator in perpetuo* over this republic. And his authority was rendered secure and universally effective by the fact that he delegated to the scholars themselves, though ever under his supreme direction, a share in the government, and made them moreover responsible, for law and order. He thus rendered impossible that absolute hostility which is so often cherished by a firmly united band of scholars toward a too often divided corps of teachers. The many scholars, who, as teachers, *ephoroi*, *oekonomoi*, *quaestores*, senators, censors and consuls, assisted in the government, formed an intermediate body between the teachers and the scholars, and by their mutual relations to each disarmed that hostility, and paralyzed its power.

Whatever judgment we may pass upon Trotzendorf's regulations, still we are warranted, from what we know of his character, in concluding, that he would not permit those regulations to degenerate into a mere round of lifeless observances. He was a genuine dictator, and, as Melancthon says of him, born to the government of a school, as truly as was the elder Scipio Africanus to the command of an

*About the year 1547, at the death of Frederick II., Duke of Liegnitz, there were but six teachers employed, quite an inadequate number for the size of the school. Trotzendorf was wont to say:—"If he should muster all his scholars together, he could present the emperor with quite a respectable army to fight the Turks." Still, strange to say, we have no more precise information on the subject.

army. Yea, he was more than a dictator, since by the exercise of a Christian faith, and a warm and active love, he secured the *affections* of his pupils.

With his views of study we are not disposed to quarrel, for, though he aimed to make Goldberg a second Latium, he did no more than his contemporaries were continually doing around him. Neither do we censure him for his sentiments respecting physical education, although we can not entirely agree with him therein. It is stated of him that he did not *insist* upon exercise, but simply *permitted* it. And yet he would look on while the boys were wrestling or running, praising the active and skillful, and rebuking the indolent and awkward. However, one of the laws of the school forbade the boys to bathe in cold water in the summer time, and to go upon the ice, or to throw snow-balls in the winter. Surely such a law as this would have been disregarded in ancient Rome, and in ancient Germany too!

In the closing years of his life, the worthy old man experienced many misfortunes. In 1552 there was a great famine in Goldberg, and in 1553 the place was swept by a pestilence. During this period he taught the few scholars who remained with him, in the upper gallery of the church, as he thought the air purer at that elevation. Already earlier, in 1549, a crushing sorrow had cast its dark shadow across his path. Three of his pupils, Karl Promnitz, Jonas Talkwitz, and Wolfgang Keppel, were making merry over their wine in the Goldberg wine-cellar, when a drunken watchman staggered in upon them, and, without saying a word, took a full cup off from the table, and drank it down. Enraged at his impudence, Promnitz hurled an empty glass at him, and, without designing it, wounded him in the head. The watchman accused them before the court, and thereupon the three young men were imprisoned, and their case carried before Frederick III., Duke of Liegnitz. He summoned them to Liegnitz, and without listening to their defense, or entering into any examination of the case, condemned them to death. Promnitz alone, at the intercession of the Bishop of Breslau, who was his cousin, was pardoned, but the two others, who had committed no crime at all, were beheaded upon the Monday next following the feast of the Three Martyr Kings.

In 1554, the year after the pestilence, a great conflagration laid a large part of Goldberg in ashes, and Trotzendorf's school house among the rest. He then went with his scholars to Liegnitz, and while there took measures to rebuild his school upon the old site. But he was never permitted to return thither. On the 20th of April, 1556, he was expounding the 23d Psalm, and as he came to the

words, "Yea, though I walk through the valley of the shadow of death, I will fear no evil: for thou art with me; thy rod and thy staff, they comfort me;" he was suddenly seized with apoplexy. He sank back, gazed up to heaven, and spake these words, the last he ever uttered;—"My friends, now am I called away to another school." He lingered speechless for five days, but retained his consciousness to the last. He died on the 25th of April, at the age of 66, and was buried on the 29th, in the church of St. John. His remains were followed to the tomb by high and low; men of princely rank uniting with peasants in paying respect to his memory. Abraham Bock erected his monument. But it was destroyed in 1699, when, by order of the Emperor Leopold, the church of St. John was given to the Jesuits.

Trotzendorf died unmarried. With a small income, and a benevolent disposition, he always remained poor. The few writings which we have from his pen, were first issued after his decease, and by some of his grateful pupils. The following is a list of the same:

1. *Catathesis scholæ Goltpergensis scripta a Valentino Trocedorfio cum præfatione Phil. Melancthi. Vitebergæ, 1561.*

The preface is dated, 1558, two years after Trotzendorf's death.

2. *Precationes V Trocedorfii recitatae in schola Goltbergensi, Lipsiæ, 1581.*

3. *Rosarium scholæ Trocedorfii. Viteb, 1568.*

4. *Methodi doctrinæ catacheticae. Gorlic, 1570.*

*Dr. Stevens, in his "*History of the Public High School of Edinburg*," makes the following record of the last illness and death of Dr. Adam, for forty years Rector of that institution.

"On the 13th of December, 1809, Dr. Adam was seized, in the High School, with an apoplectic affection. He lingered five days under the disease. Amidst the wanderings of mind that accompanied it, he was continually reverting to the business of the class, and addressing the pupils; and in the last hour of his life, as he fancied himself examining on the lesson of the day, he stopped short, and said: "But it grows dark, boys, you may go," and almost immediately expired."—*Ed.*

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IX. HISTORY OF COMMON SCHOOLS

12

CONNECTICUT.

BEFORE proceeding to the Fourth Period, from 1800 to 1838, we add a few facts, which may serve as notes to the preceding.

JOHN HIGGINSON the first teacher in Hartford of whom we have any information, was born in England, August 6th, 1616, and came to America with his father, Rev. Francis Higginson, first minister of Salem, Massachusetts, in 1629. He removed to Hartford early after the first settlement, and was a possessor of land there in 1639. After leaving Hartford, he became a preacher, and was chaplain at Saybrook fort; was afterward assistant to Mr. Whitfield, at Guilford, and subsequently his father's successor at Salem, where he remained until his death, in 1708, at the age of 92, having been a minister 72 years. His colleague, Rev. N. Noyes, in an elegy upon him, says:—he

“For rich array cared not a fig,
And wore Kikaha's periwig;
At ninety-three had comely face,
Adorned with majesty and grace;—
Before he went among the dead,
His childrens' children children had.”

He was succeeded at Hartford, probably immediately, by a Mr. COLLINS, whom Winthrop calls “a youngscholar, full of zeal, &c.” He had been preaching at St. Christopher's or Barbadoes, with considerable effect, and brought some of his converts with him. Hearing of Mrs. Ann Hutchinson's opinions while at Hartford, he warned a friend against them, but upon himself meeting her, at once became her disciple, and afterward her son-in-law. He was murdered by the Indians, together with her and her family, in 1643.

WILLIAM ANDREWS, a native of Cambridge, Massachusetts, is the next teacher of whom any thing is known. He is the first mentioned in Hartford town records; where, date, 1643, it is ordered that he shall be paid sixteen pounds a year as salary. The site of his residence is now within the area of the Central Park, being the north corner of Elm Street and Trinity Place.

After Andrews, the next known teacher was CALEB WATSON, a graduate of Harvard College, 1661. He taught for many years; from shortly after 1670 to (probably) near his death, in 1725. It should not be forgotten, however, that, during a portion of this early period, “Goody Betts” kept a dame school in the city. She was cotemporary with Higginson.

PERIOD V.

FROM 1800 TO 1838.

At the commencement of the present century, the Legislation of Connecticut, respecting the education and employment of children, and the establishment and support of schools, and other institutions and agencies of learning, stood as follows :

An Act for the Educating and Governing of Children.

Forasmuch as the education and well governing of children is of singular benefit to a people ; and whereas many parents and masters are too negligent of their duty in the matter :

1. *Be it enacted by the Governor and Council and House of Representatives in General Court assembled*, That all parents and masters of children shall, by themselves or others, teach and instruct, or cause to be taught and instructed, all such children as are under their care and government, according to their ability, to read the English tongue well, and to know the laws against capital offenses ; and if unable to do so much, then at least to learn some short orthodox catechism without book, so as to be able to answer to the questions that shall be propounded to them out of such catechism, by their parents, masters, or ministers, when they shall call them to an account of what they have learned of that kind.

2. And if any parent or master shall neglect the performing what is by this act required of them, every such parent, or master being thereof legally convicted before any one assistant, or justice of the peace, shall forfeit and pay the sum of *three dollars and thirty-four cents*, to and for the use of the poor of the town whereto they belong.

3. And that the selectmen of every town in this State, in their several precincts and quarters, shall have a vigilant eye and inspection over their brethren and neighbors ; and see that none of them suffer so much barbarism in any of their families, as to want such learning and instruction ; and to take care that due prosecutions be made for the breach of this act.

4. And the grand-jurymen in each town, are hereby required to take care, and see that what is by this act required for the education of children, be duly performed ; and to make presentment of all breaches of this act which shall come to their knowledge.

5. *And be it further enacted*, That all parents and masters shall employ and bring up their children and apprentices in some honest and lawful calling, labor, or employment profitable for themselves and the State.

6. And if the selectmen of the town where such parents or masters live, after admonition by them given to such parents or masters, shall find them still negligent of their duty in the particulars aforementioned in this act ; whereby such children grow rude, stubborn, and unruly, such selectmen (with the advice of the next assistant or justice of the peace) shall take, and they are hereby fully authorized and empowered to take such children and apprentices from their parents or masters, and place them with and bind them to some master or masters ; males till they are twenty-one years of age, and females till they are eighteen years of age ; to the end they may be suitably instructed, employed, and governed ; which binding shall be good and effectual, for the holding and governing such children, the terms aforesaid.

7. And that whatsoever child or servant, upon complaint made, shall be convicted of any stubborn or rebellious carriage against their parents or governors, before any two assistants or justices of the peace, such assistants or justices are hereby authorized and empowered, upon such conviction, to commit such child or servant to a house of correction, there to remain under hard labor and severe punishment, so long as said authority shall judge meet ; who on the reformation of such children and servants, may order their release, and return to their parents or masters aforesaid.

The first six sections of the foregoing Act, constituted the title

"Children," in the code of 1650, and as originally adopted, was a literal transcript of the law of Massachusetts on the same subject passed in that colony in 1642. The substance of the seventh section is contained in an Act under the title of "*Rebellious Children and Servants*," in the statutes revised and published in 1672. It was annexed to this act at the revision in 1702.

The laws respecting schools, as has been already stated, were carefully revised and consolidated in May, 1799, so as to read as follows :

An Act for Appointing, Regulating and Encouraging Schools.

1. *Be it enacted by the Governor and Council and House of Representatives in General Court assembled*, That each school society in this State shall, by their vote in legal meeting, have full power to grant rates for the building and repairing of school-houses, and the supporting of schools therein, or to make any lawful agreements for the same purposes, and what such society shall agree upon and vote, and respecting the encouragement and support of schools, shall bind itself and all its members ; and if any officer duly appointed at any time by such society shall refuse to execute the trust committed to him, he shall suffer the penalty which town officers are liable to, for refusing to serve in the offices to which they are chosen.(1)

2. *Be it further enacted*, That each school society shall have full power to divide itself into proper and necessary districts, for keeping their schools, and to alter and regulate the same, from time to time, as there may be occasion ; (2) and whenever it may be necessary and convenient to form a district out of two or more adjoining societies, such district may be formed by the vote of the said societies, and may be, by a like vote, altered or dissolved at their pleasure ; and every such district shall be under the inspection and superintendency of the society where its school-house shall be situate, and when such district may agree to build a school-house, the place on which the same shall be erected, shall be fixed by a committee agreed upon by said societies, upon application of said district, or any distinct component part thereof : and the committee shall return their doings in writing to the clerk of the society within the limits of which the place shall be fixed, which shall by him be recorded.(3) And each school society is hereby empowered to appoint annually some proper person, a committee, for each school under its superintendency, to provide an instructor for such school, with the approbation of the visitors thereof, herein after provided, and to manage the prudentials of such school : *Provided nevertheless*, That nothing in this paragraph shall be construed to affect any district incorporated by a special act of the general assembly.(4)

3. *Be it further enacted*, That the treasurer of this State shall annually deliver the sum of *two dollars*, upon every *thousand dollars*, in the list of each school society and proportionably for lesser sums, out of the rate of each town, as the

The following notes are copied from the revision of the statutes, made in 1808, and printed with chronological notes, under the supervision of John Treadwell, Enoch Perkins, and Thomas Day.

(1) In May, 1717, the major part of the householders of the several ecclesiastical societies were empowered to grant taxes for the support of their respective schools, and to appoint collectors. At the same time, it was enacted, that what such major part should agree to, respecting the support of schools, should be binding on the whole. The appropriation act of May, 1798, recognized a *distinct* capacity in these societies, and denominated them "*school societies*," as relative to the objects of schooling. In May, 1798, they were, in that capacity, invested with the powers, and subjected to the duties, which the former laws had given to and required of ecclesiastical societies, relative to the same objects. At the revision of this act in May, 1799, the section to which this note relates, was moulded into its present form.

(2) Passed in October, 1766.

(3) Passed in May, 1799.

(4) It appears to have been the practice for towns and societies to appoint committees for the schools previous to October, 1708 ; but no statute expressly provided for their appointment, until the general revision in 1750. In May, 1799 the provision referred to was considerably modified.

same shall be brought into the State treasury, unto the committee of such school society, for the benefit of schools in such society.(5)

4. *Be it further enacted*, That the interest of the funds provided by the sale of the Connecticut Reserve, as from time to time, it shall become due, shall be paid to the treasurer of this State, and the school societies which shall conform to the provisions of this act shall be entitled to the said interest to be distributed to them severally, according to their lists; and the controller of the public accounts shall, on application of the committee of any school society, draw an order on the treasurer for such society's part of the dividend of such interest, as shall be in his hands on the first day of *March*, and on the first day of *October* annually: *Provided*, That in future, no order shall be drawn in favor of any society as aforesaid, nor shall the treasurer deliver the monies directed to be delivered in the preceding paragraph, until the committee of such society shall have certified in writing under their hands, in the words following, viz:

[We the committee of the school society in the town of do certify that the schools in said society have been kept for the year last past by instructors duly appointed and approved, and in all respects according to the directions of the statute, entitled "an act for appointing, regulating and encouraging schools," and that all the monies drawn from the public treasury by said society for said year, appropriated to schooling, have been faithfully applied and expended in paying and boarding said instructors. Dated at A. D.

} Committee.

To the (here insert *treasurer or controller of the public* }
accounts as the case may require.)(6)]

5. *Be it further enacted*, That if the aforesaid monies or any part thereof drawn by any school society as aforesaid, or any other public monies arising from the sale of certain western townships, or from an excise heretofore collected in this State, appropriated to schooling, in such society shall at any time, by order of such society, be put to any other use than for the support of schools as aforesaid, such monies, so misapplied, shall be forfeit to this State,(7) and it shall be the duty of the controller to sue for and recover such monies for its use.(8) And if any committee shall at any time make a false certificate, by means whereof monies shall be fraudulently drawn out of the public treasury, each person signing such false certificate shall forfeit the sum of *sixty dollars* to the State, to be recovered by action of debt on this statute. And the controller shall bring forward a suit to recover the same accordingly.(9)

6. *Be it further enacted*, That the committee of each school society be and they are hereby empowered and directed to take care of, and improve all such bonds and monies as have been divided and set out to such society, in their former capacity of a town or ecclesiastical society, out of the monies raised by the sale of the said townships, or otherwise, for the benefit of the schools in such society, and to render their account, when required, to such society. And such committee are hereby authorized and empowered to take into their care and custody, all other estates, lands, and interests that have been granted, sequestered, or do belong to the schools in such society; and shall use, improve, and dispose of the interest, increase, profit or rent, arising from any such monies, lands or inter-

(5) Passed in October, 1700. In October, 1754, the allowance was reduced three-fourths; in October, 1766, it was raised to one half; and in May, 1767, it was restored.

(6) Passed in May, 1793, except the form of certificate, which was prescribed in May, 1799.

(7) So much as relates to monies arising from the sale of "certain western townships" (which were seven townships in the county of Litchfield,) was passed in May, 1733. An act passed in May, 1766, having granted the arrears then due of an excise on liquors, tea, &c., which had been imposed several years before, also the interest of the excise money then collected, for the support of schools; and another act passed in October, 1774, having granted the principal of such excise money, for the same purpose; the General Assembly, at the revision in 1784, extended the provisions of the act of May, 1733, to these funds. For a misapplication of the Western Reserve monies, a forfeiture was enacted, by the appropriation act of May, 1796. A similar provision was inserted in the act respecting schools, in May, 1798; and incorporated into this act, in October, 1798.

(8) This was formerly the duty of the Treasurer; made the duty of the Controller in May, 1793.

(9) Passed in May, 1798.

ests, according to the true intent of such grant, or sequestration, to be in like manner accountable to such society.(10)

7. *Be it further enacted*, That such committee be, and they are hereby authorized and empowered to lease all such lands, or real estates; and loan such monies formerly given or granted for the use of schools, and to commence and prosecute any proper suit or suits for the recovery of such lands, monies, or other estates, and to take leases, bonds, or other securities, to themselves and their successors in office, for the use aforesaid, and to institute any suit or suits thereon, and the same to pursue to final judgment and execution; which bonds, leases, and securities, shall, by said committee be lodged with the treasurer of the society; who is required to keep an account thereof, and hold the same under the direction of said committee; who shall account to the said society for their improvement of such estate and interest when required.(10)

Provided nevertheless, That this act shall not extend to any estate formerly granted by any particular person, for the benefit of any school or schools in any particular town or society, nor to grants of any interests formerly made by any person to any town or society for the support of schools, wherein the grantor hath committed the care and improvement of such estate, by him given, to particular persons with directions for a continual succession in said trust, or where the general assembly hath formerly committed the disposition of the profits of such estates to a committee, in a continual succession; any thing herein contained to the contrary notwithstanding.(10)

8. *Be it further enacted*, That all public monies that are or shall be provided for the support of schools in any school society, and received by its committee, shall by them, from time to time, be paid over to the treasurer of the society, who shall stand charged therewith, and shall account therefor according to law; and the said committee shall, from time to time, receive, examine, and liquidate the accounts of the districts, and parts of districts if any be, and where such districts, or those to which such parts belong shall have kept their schools according to the provisions of this act, shall draw orders on the society treasurer for their proportion of all the public monies, according to their respective lists.(11)

9. *Be it further enacted*, That each school society shall appoint a suitable number of persons, not exceeding nine, of competent skill in letters to be overseers or visitors of all the schools in such society, whose duty it shall be, in any of their meetings, to examine the instructors, and to displace such as may be found deficient in any requisite qualification, or who will not conform to the regulations by them adopted; to superintend and direct the instruction of the youth in letters, religion, morals, and manners; to appoint, at their discretion public exercises for the youth, to visit the schools twice at least, during each season for schooling, at which visitations two or more shall be present; and particularly to direct the daily reading of the bible by such of the youth as are capable of it, and the weekly instruction in some catechism by them approved, and to recommend that the master conclude the exercises of each day with prayer; which overseers shall continue in office during the pleasure of the society.(11)

10. *Be it further enacted*, That any school society shall have liberty, by a vote of two-thirds of the inhabitants present in any legal meeting, warned for that purpose, to institute a school of a higher order, for the common benefit of the society, the object of which shall be to perfect the youth admitted therein in reading and penmanship, to instruct them in the rudiments of English grammar, composition, arithmetic, and geography, or, on particular desire in the Latin and Greek languages; also in the first principles of religion and morality, and in general to form them for usefulness in society. And no pupil shall be admitted into the said school except such as have passed through the ordinary course of instruction in the common schools, and shall have attained to such maturity in years and understanding, as to be capable of improvement in said school, in the opinion of the

(10) Passed in May, 1741. The powers here specified were originally given to the selectmen of such towns wherein there was but one ecclesiastical society, and to the society committee of such societies where there were more than one in a town. In May, 1798, these powers were transferred, by a general provision, to the several committees of the school societies, in pursuance of which, the sections here referred to, received their present form in May, 1799.

(11) Passed in May, 1798; modified in May, 1799.

overseers, and shall by them, or any three of them, be admitted therein: and if, at any time, it shall so happen, that more pupils are admitted, than can be accommodated or instructed in said school together, they shall be instructed in such course and order, as to give all an equal opportunity.(11)

11. *Be it further enacted*, That for every year in which such school shall be supported, such part of the public monies belonging to any district shall be paid over to the committee of such school for the use thereof; as that the part paid over shall be to the remaining part, as the number of children of said district actually attending said school for such year, computing from four to fourteen years of age, are to those of them of the same age who do not attend said school.(11)

12. *Be it further enacted*, That the inhabitants of any school district, qualified to vote in school society meetings, shall have power to tax themselves, for the purpose of building and repairing, or otherwise procuring a school-house for said district, of furnishing the house with necessary appendages and accommodations, and of purchasing suitable ground on which to erect such school-house, and of supplying wood; to choose a clerk, who shall be sworn to make true entries, and give copies of the votes of the district; to appoint a collector of any tax they shall lay on the polls and ratable estate of the inhabitants, who shall have the same power to levy and collect such tax, by warrant from an assistant or justice of the peace, which warrant they are hereby authorized to give, as other collectors of taxes by law have; and to appoint a treasurer, who shall also be sworn to a faithful discharge of his trust, who shall receive all monies belonging to the district, shall pay out the same to the order of the district, or its committee, and render his account annually.(12)

13. *Be it further enacted and provided*, That the committee appointed for the district by the school society, shall cause all the inhabitants aforesaid to be warned to meet at some convenient place within the district, at least three days inclusively, before such meeting; and provided two-thirds of said inhabitants, present at such meeting, are in the vote for laying such tax; and whenever a tax is laid to build a school-house in any district, the place on which the house shall be erected, shall be fixed by a committee appointed by the society for that purpose, unless the said inhabitants are unanimously agreed in the place, who shall return their doings in writing to the clerk of the society, and by him shall be recorded: and the said inhabitants in any of their lawful meetings shall have power, by the major vote of those present to make rules relative to the school-house and to damages done the same, and to the furniture and appendages, and relative to the wood to be supplied by the inhabitants, and to compel obedience, by denying the privilege of the school to the children of such as refuse a compliance with such rules.(13.)

14. *Be it further enacted*, That the statute, entitled "an act for appointing, encouraging, and supporting schools," and the statute, entitled "an act in addition to and alteration of an act entitled an act for appointing, encouraging, and supporting schools," be and the same are hereby repealed.(14)

This act was evidently prepared with much care, and embraces a systematic codification of all the early enactments on the subject of schools, with the new provisions introduced into the acts of 1798 and 1799. It is defective in not making it obligatory on, and in not giving encouragement to, the large societies and districts to maintain schools of different grades, and to keep the schools open for at least eight months in the year. No time being specified, the schools were soon kept just long enough to use up the public money derived from the State and society funds, and then closed as public schools.

(12) An act, containing most of these provisions, was passed in May, 1794. Its duration was at first limited to two years; it was afterwards continued in force until May, 1797; when it was superseded by an act in nearly the terms of the text.

(13) This section, also, had its origin in the act of May, 1794. It was extended and modified in May, 1797, in May, 1798, and in May, 1799.

(14) Passed in May, 1799.

The first apportionment of the income of the School Fund was made in 1799, among the school societies, according to the lists of polls and ratable estates in each. The interest had been allowed to accumulate from September 2, 1797, when the interest was first charged, and amounted in March 1799 to \$60,403 78. In March 1800, the dividends were \$23,651. Up to this date the fund was managed by the committee that negotiated the sale.

In 1800, John Treadwell, Thomas T. Seymour, Shubael Abbe, and the Treasurer for the time being, were appointed "Managers of the funds arising in the sales of the Western Reserve." During the period of the thirteen years in which the fund was administered by the committee, and Board of Managers, the interest divided and paid out to the societies amounted to \$456,757 44, being an average of \$35,135 18 per annum. The thirty-six bonds given by the original purchasers, and resting on personal security, had increased, up to May 1810, to nearly five hundred, most of which had been from time to time secured by mortgages on real estate.

In 1809, at the October session, it appeared from the Report of the Managers of the School Fund, that a large amount of interest was unpaid, and the collateral securities of the original debts were not safe. In view of these facts a committee of the Legislature, of which the Hon. David Daggett was Chairman, recommended that the management of the fund should be intrusted to one person, and that efficient measures should be adopted to save the capital as well as interest from loss.

In 1810, at the May session, the Hon. James Hillhouse,* then a

* There was not another man in the State who combined in so large a measure the requisite qualifications for the post—the confidence of all parties in his ability, honesty, experience and public spirit. The following touching tribute to the services and worth of James Hillhouse, by his son, the poet, James A. Hillhouse, is taken from a little poem, entitled *Sachem's Wood*—composed to commemorate the change of name, from Highwood to Sachem's Wood, of the noble estate, composed of "upland slope and stately oaks," which the father bequeathed to his family.

Ah! what a race by him was run,
Whose day began before the sun;
Who, at the sultry hour of noon,
Felt action, action still a boon;
Who, at the weary shut of eve,
No respite needed, no reprieve;
But, in those hours when others rest,
Kept public care upon his breast!
Need we demand a cherished thought,
For one whose lavish labors brought
Health, comfort, value, praise, and grace,
(Even for our bones, a resting place,
To the lov'd spot for which he stood,
When neighbor townsmen gasped in blood?—
But heaven leaves not to human praise
The recompense of well-spent days.

member of the United States Senate, was appointed sole "Commissioner of the School Fund." Mr. Hillhouse immediately resigned his post in the Senate and entered on the duties of his new

The cheerful morn, the short, sweet night,
The mind, as sunshine, ever bright,
Approving conscience, growing store,
(For tho' God took, he gave back more;)
A breast, like Hector's, of such space,
That strength and sweetness could embrace;
Power to endure, and soul to feel
No hardship such, for others' weal;
Ardor, that logic could not shake;
Resource, the nonplus ne'er to take;
A filial love of mother earth
That made keen labor sweet as mirth;—
All, brought him to his age so green,
Stamped him so reverend, so serene,
A stranger cried, (half turning round,)
"That face is worth a thousand pound!"
Urged by a simple antique zeal,
Which *spoils-men* are too wise to feel,
He traversed States like stents for boys;
Huge forests pierced o'er *corduroys*;—
Now, grain by grain, the folios sifted,
Thro' which some Proteus title shifted;—
Now, o'er deep fords, by night, as day,
O'er mountain ledges, pick'd his way;
Here, on his path, the savage glaring,
There, savage whites his gray head daring;—
Still—rain, or snow, or mirk, or mire—
Tracks were the tokens of the sire!
Fancy oft bids affection mark
His little, onward-tolling ark,
Like a dark speck, on some hill's breast,
Climbing, to vaniah in the West;
And asks, what thoughts sustained and cheer'd,
What were his hopes, and what he feared?
If aught he feared, 'twas not that Eye,
Certain the upright to descry,
That watched thro' houseless wilds his way,
Kept him in darkness safe as day,
And, doubtless, soothed his journeyings lone,
As that meek Servant's of his own.
Like a ripe ear, at last he bends
Close on the brink, that trial ends.
None saw his spirit in decay,
Or marked his vigor ebb away.
Grace bade him lay his own white head,
For the last time, on his own bed,
Then, as to spare the gloom of death,
Took, as a draft, the *Sachem's* breath.

Sachem was the *sobriquet* by which James Hillhouse was known in Congress and elsewhere. He came into the Senate in 1796, in the place of Chief Justice Ellsworth, who went out the same year; served the remainder of his predecessor's term, went through two terms of his own, and had commenced the third, when his resignation took place in 1810—having been 14 years in the Senate, and five in the House of Representatives. He was three times elected to Congress under the old Confederation; but declined taking his seat.

When persuaded, with some difficulty, that the public welfare required him at this arduous post, Commissioner of the fund, in the same *spirit* in which Mr. Jay, yielding to the argu-

office. He found that the capital consisted chiefly of the debts due from the original purchasers of the Western Reserve, and the substituted securities which had been accepted in their stead. These securities had in the course of twenty years, by death, insolvency and otherwise, become involved in complicated difficulties. The interest had fallen greatly in arrears, and in many cases nearly equaled the principal. The debtors were dispersed in different States. Without a single litigated suit, or a dollar paid for counsel, he reduced the disordered management to an efficient system, disentangled its affairs from loose and embarrassed connections with personal securities and indebted estates, rendered it productive of a large, regular, and increasing dividend, and converted its doubtful claims into well secured and solid capital. During the fifteen years of his administration, the annual dividend averaged \$52,061 35, and the capital was augmented to \$1,719,434 24. The amount of interest divided by the first Commissioner was \$780,-

ments of Washington, undertook the ungracious task of the British treaty—he hung up his third term in the Senate of the United States, then just commencing, and entered on a series of exertions, in which he displayed a fortitude, a perseverance, and a practical sagacity, that have never failed to excite surprise. The power of bodily endurance would have been nothing without the infinite tact in business; skill would have fallen short of its objects, without miraculous patience and perseverance; and nothing could have disarmed opposition, but that natural spring of sweetness in his disposition, which perpetually welled out in the midst of appalling labors, and converted in many, many instances, the suspicious and intractable, into sincere and zealous friends. The astonishing little animal he drove for six or eight of the first years, sometimes took the *Sachem* seventy miles in a day. On one occasion, he pushed her thirty miles after twilight *without stopping*; having been dogged by two ruffians, in a desolate part of the country, who attempted to deprive him of his trunk. It contained, unknown to them, twenty thousand dollars of the public money. After putting them to flight, he thought it prudent to make as many tracks as possible. Her subsequent blindness he ascribed to the severe drive of that memorable evening.

The result of his labors in behalf of the Connecticut School Fund, alluded to in some of the foregoing lines, may be taken in the words of a scrupulous and well-informed narrator, it having been previously stated that its affairs had fallen into an entangled condition. "The best friends of that fund, and those most acquainted with its history, have said that they would have been happy to have realized from it, at that time, eight hundred thousand dollars. After fifteen years' management, he left it increased to one million seven hundred thousand dollars of solid property. The difference was to be ascribed to his skill, his fidelity, his accuracy, his patience, and his wonderful and indefatigable industry. While that fund shall be perpetuated, and shall continue to carry through all the streets of our cities, and every rude, secluded hamlet among our hills, the blessings of instruction, it will stand a monument to his faithful and disinterested patriotism." The toils he underwent, (for the property consisted chiefly in lands scattered in five states, some parts of them, then, very difficult of access,) and the expedients he resorted to, in accomplishing his great objects, can not even be shadowed here. They were highly curious and interesting. He was literally "in journeyings often—! watchings often—in hunger and thirst—in perils from robbers—in perils in the wilderness"—to say nothing of the perils nearer home, "among false brethren." Once, he was frost bitten; losing, in consequence, during the greater part of a winter, and far from his family, the use of one eye: but I have been assured that he did not, even then, spare the other. Once he was arrested as a criminal, by an enraged debtor, who, in his own neighborhood, exercised a party influence, and but just escaped the indignity of a prison. Twice he was brought to death's door by fevers taken in the unsettled and unwholesome regions he was obliged to visit.

920 24, which added to the sum of \$456,757 44, divided by the Committee and Board of Managers, make an aggregate of \$1,237,677 68—a sum exceeding the original capital.

To this capital Mr. Hillhouse contributed the sum of \$10,000,—which had been allowed to him by three individuals from the circumstance of their supposing themselves peculiarly benefitted by his management and services as Commissioner, in settling the various and complicated concerns of the fund with their estates. This allowance, with the interest on the same, amounted at the close of his administration to a larger sum than he received from the State for fifteen years of such labor, as but few public officers of even the same ability have the constitution to endure, under such combinations of hardship and peril, as can never happen again in the history of the fund. Of this fund, Mr. Hillhouse richly deserves the appellation bestowed by Eliot, the spiritual friend of the Indians, on Sir Robert Boyle, for his care and liberality in their behalf—“*The right-honorable, charitable, indefatigable, nursing father.*”

In 1810 the expense of keeping a district school over the amount of public money was apportioned among the proprietors of the school according to the number of days each had sent a scholar or scholars to the same, and in 1811 this was altered so as to authorize the apportionment according to the number of persons sent.

In 1813 the proprietors of factories and manufacturing establishments were compelled to see that the children in their employ were taught to read, write, and cipher, and that due attention is paid to the preservation of their morals. To secure its observance, the selectmen and civil authority are constituted a board of visitors, to ascertain annually, in the month of January, or some other time by them appointed, the facts in the case, and to report any neglect to the next county court, which is authorized to impose such fine or forfeiture as may be deemed just.

In 1816, at the commencement exercises of Yale College, Denison Olmsted, then principal of the Union School in New London, in an oration “*On the state of education in Connecticut,*” delivered by him on the occasion of taking the degree of Master of Arts, speaks of the operation of the school fund, and the condition of the common schools as follows:—

The amount of the fund at the present time, is \$1,500,000—a provision for common schools, to which, it is presumed, the world affords no parallel. But while this system has brought signal blessings to the poor, it has also accustomed the wealthiest ranks to extreme frugality in the expenses of education; and as the public money has rendered it unnecessary to pay largely, many have acquired a habit of grudging to pay any thing. In such a state of things, who can but wish that better measures were adopted to secure the benefit of that system

which the wisdom of our legislature has devised, lest the liberal provision be wasted on ignorance, and only afford a hiding-place for parsimony. In the pursuit of cheap instructors many districts rest satisfied with such as are grossly ignorant; and this brings us to the whole secret, to the great defect in our school education—the *ignorance and incompetency of schoolmasters*.

I do not say that here we are to expect men of liberal education to keep all our village schools; but, with private resources so ample, and a public provision so liberal, we ought not to rest satisfied with teachers whose attainments terminate with a simple round of elements, which many of the pupils know as well as themselves. Now it is a notorious fact, (though a fact which we may well blush to announce,) that a great part of our public school money is expended on such teachers as these: teachers, whose geography scarcely transcends the mountains that bound their own horizon; whose science is the multiplication table; and whose languages, history, and belles-lettres, are all comprised in the American Preceptor and Webster's Spelling-book.

Many, it is feared, will not listen to any proposals for raising the standard of school education, from a dread of enhancing the expense. Let it be observed then, that most of our village schoolmasters are furnished by the schools themselves, and were the standard once raised, even in only part of the schools, a sufficient number of instructors would be produced, who would be competent to teach in the same studies; and thus the standard, when once gained, would maintain itself. But, in most cases, the plea of being unable to pay for good schoolmasters is unfounded: it is the plea of avarice; of one who knows not, or feels not, the benefits of education, but considers land a better heritage than learning. To him whose family is numerous, and whose income is small, I will say, is there no superfluity in dress—no luxury of the table—no article of furniture, which may be retrenched, in order to accomplish so desirable an object! If not, make the saving on the child himself; and again imitating the highland peasant, clothe him in the humblest garb, and feed him on oatmeal, and let the saving be applied to enlarge his capacity and enrich his mind.

To supply the defect of "ignorant and incompetent teachers," Prof. Olmsted devised the "*Plan of an Academy for schoolmasters*," the earliest suggestion and plan, in this country, of an institution for the professional training of teachers.*

In 1818, a Constitution was adopted as the fundamental law of the State, in which the following provisions respecting education and religion are introduced.

ARTICLE I.—*Declaration of Rights.*

SEC. 3. The exercise and enjoyment of religious profession and worship, without discrimination, shall forever be free to all persons in this State; provided, that the rights hereby declared and established, shall not be so construed as to excuse acts of licentiousness, or to justify practices inconsistent with the peace and safety of the State.

SEC. 4. No preference shall be given by law to any Christian sect, or mode of worship.

ARTICLE VIII.—*Of Education.*

SEC. 1. The Charter of Yale College as modified by agreement, with the corporation thereof, in pursuance of an act of the General Assembly, passed in May 1792, is hereby confirmed.

SEC. 2. The fund, called the SCHOOL FUND, shall remain a perpetual fund, the interest of which shall be inviolably appropriated to the support and encouragement of the public or common schools throughout the State, and for the equal benefit of all the people thereof. The value and amount of said fund shall, as soon as practicable, be ascertained, in such manner as the General Assembly may prescribe, published and recorded in the Comptroller's office, and no law shall ever be made authorizing said fund to be diverted to any other use than the encourage-

* Letter of Prof. Olmsted, in Connecticut Common School Journal. Vol. v. p. 70.

ment and support of common schools, among the several school societies, as justice and equity shall require.

In 1820, the appropriation of \$2 on every \$2000 of the avails of the State tax for the use of schools, was to cease as soon as the income of the school fund exceeded \$62,000, which it did the next year. From this date the income of the fund was apportioned to the several school societies and districts, according to the number of persons over 4 and under 16, in each, on the first Monday of August of each year.

In 1822, Governor Wolcott in his annual message, reminds the General Assembly of its duty "to observe with vigilant attention whether the system [of common schools] which their wisdom has formed, is duly executed, to supply such deficiencies as time may discover, and to aid such improvements adapted to our circumstances as the experience of this, or any other country may recommend to our adoption."

Without intending to intimate that any defects, either in the system or in the management have yet been discovered, I can not deem it useless to suggest, that the efficiency of our system of education will always depend upon the capacity and skill of the instructors who are from time to time employed in the primary schools. It was never intended that the contributions from the school fund should be a full substitute for those which the districts may raise by taxing their members. In every district such instructors only ought to be employed as are capable of raising the grade of education to such a point as the minds of the pupils are generally capable of sustaining. The difference between what is passable, and what is excellent is immense, while economy is always a noble virtue, parsimony is frequently a degrading vice; and mediocrity ought to command as little respect in a school as in a college; it will every where, and at all times evince an ascendancy of feeble views, or a "*withholding of more than is meet, tending to poverty*," of the most abject nature, the poverty of intellect.

In conformity with the laws of nature, which are always wise, provision is made in our system for instituting schools of a higher order than those which may be established by the districts. These are precious institutions, well adapted to encourage the higher advances in science. A third grade might be introduced, or perhaps engrafted on some of our existing academies with great benefit to the State, and with as high a probability of profit as any instrument of capital within my knowledge. In such institutions, the indispensable attention to religion and morality might be united with instruction in all those branches of physical science and knowledge which impart to youth intelligence, vigor, and energy, in all those concerns of active life to which they may be devoted.

About this time the impression began to prevail, that the improvement of the schools had not kept pace with the increase of the revenues of the school fund. A writer in the North American Review for April, 1823, in an article on the Report of the Commissioner of the School Fund, submitted May, 1822, after giving a history of the legislation of the State on the subject of schools, and noticing the change made by the Act of 1795, in the mode of supporting schools, says—

Our readers no doubt are now prepared to ask, what great advantage has the State of Connecticut derived from its school fund, and how far has this fund con-

tributed to promote the particular object to which it is devoted, the general diffusion of elementary learning? According to the old laws, as we have already seen, schools were maintained in the several districts; and one school at least was supported through the year in each town containing seventy householders, and six months were the number of householders was less than seventy. By the present system we do not find that there is any obligation on the school societies or districts to support schools any longer, than the public money affords the requisite aliment; and the consequence must be, what we are informed is extensively true, that the continuance of schools is determined by a very obvious and convenient rule. Taxation for schools being infrequent, must be borne with impatience; and if some school societies increase the school money by a tax, the practice is gradually discontinued, and will soon entirely cease. As to time then, we do not find that any thing has been gained by the schools from the operation of the fund. If some schools continue longer, each year, others are brought sooner to a close, the amount of time, through the whole, being not materially varied.

It does not appear from the laws of Connecticut, nor do we learn from such inquiries as we have made, that the qualifications of instructors have been increased, or the branches of instruction multiplied through any influence of the fund. If education in common schools has assumed a higher character within the last thirty years, it is owing rather to the more elevated standard of instruction through the country; and the improvements, probably, are no greater, than they would have been, if the school fund had never existed. The great advantage, then, of the Connecticut school fund, appears, on investigation, to be this,—it relieves the several school societies from taxation, an advantage, no doubt, which is duly appreciated. Admitting, however, that it is a privilege, and we are not disposed to deny it to be such, for an inhabitant of Connecticut to be able to say, that schools formerly paid for by those who enjoyed their advantages, are now supported by a fund, and so cost nothing; would it not be a privilege far greater, to be able to designate the particular improvements, which the school fund has been the means of introducing into the system of school education? Where means so ample and imposing are provided, we look, of course, for some unusual and splendid result. To be informed that a fund which enables a community no larger than Connecticut to expend more than sixty thousand dollars a year on schools, and which will soon afford ninety or one hundred thousand dollars a year for the same object, produces no visible effect, except in diminishing taxation, and that the whole benefit is limited to the pocket, much as we admire thrift and good management, leaves on our minds, to say the least, a strong feeling of disappointment. A school fund, according to the common rules of judging, ought to profit the schools, as well as their supporters.

We would not be understood to disapprove of legislative aid to common schools, but to aim at having it so regulated as to produce its full and proper effect. If it were possible, we would take from the common schools of Connecticut nothing which they now enjoy, and would merely apply a portion of the additional income, which will soon be realized, to the encouragement of the higher branches of education. Nothing which could be done would, more directly than this, benefit the common schools themselves. Let a superior school, intermediate between the common schools and the university, be maintained in each county of the State, where all of those, who aspire to teach in common schools, may be themselves thoroughly instructed. Such a measure would give new vigor to the whole system of education. The board of visitors, which now decides on the qualifications of instructors, must be, in most instances, a very imperfect check on the intrusion of ignorance. The teachers, it is understood, have now very seldom any other preparation, than they receive in the very school, where they afterwards instruct, or in the school of some neighboring district, where the advantages for improvement are no better. If this, however, can not be done, and the whole income of the school fund must be appropriated directly to common schools, we see no reason why teachers in these schools should not be obliged to qualify themselves for their employment, in such higher schools or academies as now exist.

There is, indeed, in the present law of Connecticut respecting schools, a provision, which might seem at first view to answer, in part, the end proposed. The provision is to this effect: that any school society shall have liberty, by a vote of two thirds of the inhabitants present, to institute a school of a higher order to

instruct youth in English grammar, composition, geography, and the learned languages; pupils to be admitted by the visitors, and such school to have its proportion of the public money. But this law, as appears on the face of it, must be wholly inoperative. We have, indeed, heard, that in one town, a vote of two-thirds of the inhabitants was obtained for the institution of such a school; and the same thing may have happened in a few other towns, but can not learn, that there is at present in Connecticut a single school instituted in the manner contemplated by this law. The law stands as evidence, that correct views of what is really needed are entertained by a portion of the legislature, but from the inadequacy of its provisions, it is evident no less striking of the actual state of public opinion.

The article closes with the following remarks on public schools of a grade above the district school.

Public patronage of academies and colleges for higher education is precisely a tax on the rich, for the benefit of the poor. The rich, it is true, send their children to them; but if there were no colleges at home, they would send their sons abroad. Look at the States in America, where schools and colleges do not flourish, and what is the relative effect on the two classes of society? The rich pay more, it is true, than they otherwise would pay, but they support private teachers, and family tutors, for the elementary education of their children, and send their sons to Princeton, New Haven, Cambridge, and to Europe. To the rich man it is of comparatively little consequence, whether the State Government, under which he lives, be willing or not to endow institutions where his sons can be educated. He can send them where a wiser policy prevails; and when they come back, they will possess more exclusively that power and influence in society, which superior education confers. The poor man, on the other hand, wants a college near at hand, in his own State, where a considerable part of the requisite supplies can be furnished from his frugal home. He has no means to purchase bills of exchange on distant cities. He can not add the costs of traveling, and the expenses of distant maintenance to the necessary charges of academical education. If the State will provide him a college where he can send his sons, he will do it. He will dispense with their personal services—no small sacrifice in a country like this—he will strain his narrow means to furnish the barely essential; but he can do no more. And will any one say, that when the government looks round upon its constituents, sees the rich alone able to get an education, while the poor are deprived of this inestimable privilege; and to remedy this great evil, lays a general tax for an academy or college for the benefit of those, who must otherwise want the means of liberal education altogether, will any one say, that this is exclusively for the benefit of the rich? It is a malignant absurdity. *Exclusively* beneficial it is certainly and ought to be to no one. But eminently and chiefly beneficial it is to the poor. The rich can do well enough without it. The poor must have it, or nothing. This alone enables the poor to bring their talents and industry into the market, and thus rise, by dint of merit, to those trusts and to that influence, which otherwise will fall exclusively into the hands of the rich. Hitherto, by the blessing of Providence, the sons of the poor have been enabled to do this. The great men of America have been mostly nursed in an honorable poverty. The pious and faithful ministers, the upright magistrates, the solid professional characters, the intelligent statesmen, and the enterprising merchants, by which America, from such poor beginnings, has been raised to such a height of prosperity, have been mostly the children of those, who labored with their own hands. There has been, till the last generation, little or no wealth in the country, and the distinction of rich and poor has been nearly nominal. With the growth of riches, this distinction will become important. The leisure commanded by wealth will more and more give persons of moderate capacity the advantage in the competition for the honors of society. At this moment, then, of all others, to cry out against the endowment of places of education, as a tax on the poor, in favor of the rich, is to betray the interests of the poor; and to play the game of the rich under the pretence of abating their immunities.

In May 1823, school societies were authorized to appoint one, three, or five persons to be a district committee. Any white male

person, qualified to vote in town meeting, and none other, was declared qualified to vote in any meetings of the district or society in which he lived. During this year the office of "Assistant Commissioner of the School Fund" was created with a salary* of \$1000 and his expenses, and the Hon. Seth P. Beers was appointed to the place.

In 1825, Mr. Hillhouse resigned, and Mr. Beers was appointed Commissioner. During his administration, which continued (till May 1849) beyond the period under consideration, by judicious sales and management, the capital of the fund was increased from \$1,719,434 24 to \$2,049,482 32, and the income from \$72,418 30 to \$133,366 50, being an average of \$97,815 15 per annum. The amount of interest paid to the several societies during the twenty-four years by Mr. Beers was \$2,347,563 80, or nearly twice the original capital. If this be added to the amount divided in the same way by his predecessor, and the Committee and Board of Managers, we have the sum of \$3,585,241 48; this increased by the dividends made and paid out since 1849, we have the grand total of \$4,103,803 18 realized as interest, out of a capital of \$1,200,000, besides paying the expense of its own management. We know not in the whole history of public funds, or trust estates, another instance so creditable to the economy, fidelity, and sound practical judgment of the persons intrusted with its management for a period of fifty-six years.

In opening the session of the General Assembly in May of this year, [1825] Governor Wolcott, after remarking that "the schools at present established in our cities and villages, including the select schools of the opulent, are insufficient for the proper education of all the children, and those of the poor and improvident, are in the greatest danger of being neglected"—recommends the general introduction of the Monitorial, or Lancasterian system, as pursued at New Haven, and in the public schools of New York. The Governor also makes the following suggestion:

Between our common schools, and an academic education in our colleges, our laws recognize an intermediate grade of a "higher order," which each of the school societies are authorized to establish by a vote of two-thirds of the inhabitants present in a legal meeting warned for that purpose. One such school was formerly required to be established in each county town; but this grade has been in a great measure, if not wholly, superseded in practice by academies and other voluntary associations, some of which have been incorporated by law: that they have been highly advantageous and profitable to the State is well known, and I think that they merit every public encouragement which can be afforded.

The years 1825 and 1826, are signalized in the history of popular education in this country by a simultaneous, although unconcerted, ✓

effort in many States to improve the common schools. The American Journal of Education, the first educational periodical in the English language, was projected in 1825, although not commenced at Boston till 1826, under the editorship of Prof. William Russell, who commenced his career as a teacher and educator in the New Township Academy in New Haven. Rev. Thomas H. Gallaudet commenced over the signature of a "Father," in the Connecticut Observer, printed at Hartford, on the 4th of January, 1825, a series of articles, in which the claims of education as a science, and teaching as an art, are ably discussed; and an institution was proposed for the special training of teachers. The same train of thought was pursued, and the same institution was recommended by James G. Carter of Lancaster, Mass., only a month afterwards, in the Patriot, printed in Boston, over the signature of "Franklin." Walter R. Johnson, of Germantown, Penn., without any knowledge of the views of Mr. Gallaudet and Mr. Carter, advocated the same views in a pamphlet entitled, "*Observations on the improvement of Seminaries of Learning*," printed early in 1825. Rev. Dr. Lindsley, President of the University of Nashville, in an address before the Legislature of Tennessee, in January, 1826, plead eloquently for this improvement of the means and quality of popular education. Governor DeWitt Clinton, in his message to the Legislature of New York, in 1825, recommends to their consideration, "the education of teachers" for common schools, and in 1826, "the establishment of a seminary" for this purpose. In the same year, Hon. John C. Spencer made an able report on the same subject in the Senate of that State. The attention of every Legislature in New England was called to the improvement of common schools by the governor of each, in his annual message. Connecticut shared in this general movement, Dr. William A. Alcott, in Bristol; Mr. A. B. Alcott, in Cheshire; Josiah Holbrook, in Derby; and Mr. Marks, in Wethersfield, each without any concert or knowledge of each others movements, were ardently engaged in the work of school improvement.

In the House of Representatives, in 1826, on motion of Mr. Hawley Olmsted of Wilton, a committee was raised "to inquire whether any, and if any, what alterations in the laws relating to common schools are necessary to raise their character and increase their usefulness." From the report of this committee, which was printed by order of the House, the following extracts are taken. After alluding to the fact that "the common schools were always an object of peculiar care to the State, and went on improving until

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the public resources enabled the Legislature to grant the late munificent endowment," the report adds :

Placed on a footing so elevated, and justly preferred to every other interest, it was not unreasonably supposed that the results of the system would correspond with its means, and that these institutions would maintain their acknowledged pre-eminence over the primary schools of other States ;—at least that they would not fail to keep pace with the progress of general improvement in our own. Facts compel your committee to say, that in their opinion they have done neither. The States of New York and Massachusetts begin, *already*, to challenge a superiority for their common schools, although it is but a few years since they looked to Connecticut for their models, and sought the aid of her wisdom. The academies of this State have never been cheered with a solitary gleam of legislative bounty, and seem to be wholly excluded from the pale of Legislative sympathies ; yet many of them have flourished. The university in this city has risen chiefly by its own energies, and urged its way to eminence with little aid from the State which it exalts and adorns. Yet common schools, on which, as on a favorite child, the public resources have been lavished with great liberality, *but with little care*, have been gradually declining in their relative standing. The result of the experiment has decided that no appropriations of money will secure the increasing prosperity of schools. They lighten the burthens of the people, but they also diminish, and for that reason perhaps, their interest in these institutions. While your committee are reluctant to believe, with many of the most enlightened men with whom they have corresponded in relation to the subject, that the common schools are in no better condition than they would have been had they received no aid from the State, they are confirmed in the opinion that they have fallen far short of that excellence which they might have attained.

In connection with the comparative depression of common schools, it should be stated, that there is an increasing indifference on the part of the people, to the interests of these institutions. To whatever causes this apathy is to be attributed, it is a fact of tremendous import, and demonstrates that this interest can not be *exclusively* intrusted to the people without injury to the State.

The parts of the system which require more immediate attention, are the books used, the qualifications of teachers, and the inspection and report of the state of the schools.

As it respects the qualifications of teachers, a matter of vital importance to the improvement of schools, the law has made no requisitions, but has left the subject entirely to the discretion of the school visitors. Your committee are of the opinion that something would be gained by specifying the requisite qualifications, assuming for a standard such as are already possessed, with a distinct intimation that it is the policy of the State, gradually to raise this standard. It is believed, that the course of instruction may be considerably extended without interfering with the branches usually taught—that the elements of geography and history might advantageously precede the more difficult branches of English grammar and arithmetic, and the principles of mensuration, with some of their more practical applications, while they encroached not on the rudiments of learning, would serve to diversify the intellectual pursuits of the young, and fit them for more extensive usefulness.

The project of a seminary for the training of teachers, a favorite measure with some of the most enlightened men of the neighboring States, however much it may promise, is deemed by the committee to be at present impracticable.

The condition of every school, as it regards the books used, the number of pupils, the branches taught, the time the school has been continued, the expenditures with similar facts, should be presented annually to the Legislature and the public. This would have the two-fold effect of obtaining that information which would enlighten the path of legislation in future, and of operating as a powerful stimulus to the career of improvement. A knowledge of the fact, that the eye of the State is watching their movements, and that their actual and comparative standing is to be known to the public, can hardly fail to increase the fidelity of teachers, the industry of pupils, and the zeal of parents.

The inefficiency of the system, has, in the opinion of your committee, arisen chiefly from the neglect of supervision on the part of the State. No measures have

been taken to ascertain the actual condition of common schools. Their internal management, their character and prospects, have not sufficiently engaged the attention of the Legislature.

With a view to invigorate and improve the system, the committee recommend the appointment of a superintendent of common schools, whose duty it shall be to recommend suitable books to the adoption of school visitors, and such modes of instruction and government as he may deem most expedient; and from the reports of the several school societies, to prepare and present to the Legislature, annually, a report, so far as he may obtain information, showing the actual condition of every common school in the State, together with his proceedings for the year.

No action was taken on the suggestions with which this report closes, but the chairman, has lived long enough to see that feature of State supervision become a part of the school system of thirty States, although at the time it was recommended here it was only recognized in the school system of the State of New York. The report was published in the newspapers, and in connection with other agencies, arrested the attention of individuals to the importance of the subject.

Early in 1827, a society was formed in Hartford "for the improvement of common schools," of which Hon. Roger Minot Sherman, was President, and the Rev. Horace Hooker, Rev. Thomas Robbins, D. D., and Rev. Thomas H. Gallaudet, were among the most active members. This was one of the earliest, if not the first society of the kind established to advance this department of popular education in this country. At a meeting of the society, held in Hartford in May, 1827, a committee was appointed to procure information and prepare a report. This committee, of which Rev. Dr. Robbins, now the venerable librarian of the Connecticut Historical Society, was chairman, opened a correspondence on the subject, with the friends of education in every town in the State, and a report was prepared and laid before the Legislature in May following.

Gov. Tomlinson called the attention of the General Assembly in 1828 to the subject, in the following language:

There is too much reason to conclude that the liberal endowment of common schools has occasioned a relaxation of the praiseworthy efforts to extend their utility which distinguished our fathers; and that many have already fallen into the too prevalent error of undervaluing and neglecting common blessings, because an unfortunate deprivation of them may not have proved their real worth.

* * * * *

To your consideration is submitted the propriety of more specifically prescribing by law the duties of the school visitors with additional sanctions, and of requiring the board in each society, in the month of September annually, to report to the comptroller the qualifications and attainments of the teachers by them approved, the number of visits made to each school, the length of time a school shall have been taught in each school district, the branches of learning taught therein, the progress made by the schools in their respective school societies. The operation of our present system might be thus officially and accurately ascertained, and a body of information collected highly useful in guiding future legislation.

This part of the message was referred to a "Joint Committee on Common Schools," of which Mr. Hawley Olmsted of Wilton, was chairman on the part of the House, and John Alsop of Middletown, on the part of the Senate. The committee coincided with the opinions of the Governor, "that the munificent donation on the part of the State, for the support of common schools, has not produced those highly beneficial effects which might have been reasonably anticipated;" "and they are fully aware that the strong reliance upon the annual aid derived from the school fund is accompanied by a correspondent want of exertion in our school societies and districts." The committee concluded with introducing a Bill for a public act, providing for the appointment of a Superintendent of Common Schools, and a semi-annual report by school visitors. The duties of the superintendent were thus defined in the second section :

It shall be his duty to recommend for the adoption of the school visitors, such books to be used in the schools, and such modes of instruction and government as he may deem most judicious; he shall collect and diffuse information on the subject of elementary education, and by all suitable means, so far as he may be able, enlighten, guide, and excite the teachers and school visitors to a faithful discharge of their respective duties; he shall visit, from time to time, the several counties within the State, and ascertain so far as may be practicable, the condition of the schools; he shall annually transmit to the clerks of the several school societies blank forms of reports for the use of the school visitors, and from their reports and other sources of information, shall prepare and present annually to the General Assembly, his report exhibiting so far as may be practicable, the condition of every common school in the State, with his proceedings during the year, and propose such modifications of the laws relating to common schools as he may deem expedient.

In the discussions which took place in legislative halls, in associations of the friends of educational improvement and in the public press, on the subject of schools and school systems at this period, frequent reference was made to the experience of Connecticut. In a "Report of a Committee appointed at a public meeting held at the State House in Trenton, New Jersey, Nov. 11, 1828," a letter written by the Hon. Roger Minot Sherman, to the committee, is published, in which, after giving a brief, but clear exhibition of our school system, the writer adds :

Requiring of the recipients of this public bounty nothing more than that it be expended according to the provisions of the law, is an obvious defect in this system. In this point, the policy adopted in the State of New York, is deserving of imitation. A sum proportioned to the amount received from the State, ought to be advanced for the same objects, by all to whom it is distributed excepting the indigent. Such a proposition would cause a valuable augmentation of the revenues of teachers, and in that way command services of a higher character. But I should not consider that as its highest excellence. We know from common and universal experience, that little interest is felt in that which demands neither expense nor attention. Our country is affluent, and pecuniary means may be commanded for whatever we have

the will to perform. Few, comparatively, are so indigent as to need charitable aid in the education of their children. A public fund for the instruction of youth in common schools, is of no comparative worth as a means of relieving want. A higher value would consist in its being made *an instrument for exciting general exertion*, for the attainment of that important end. In proportion as it excites and fosters a salutary zeal, it is a public blessing. It may have on any other principle of application, a contrary tendency, and become worse than useless. It may be justly questioned whether the school fund has been of any use in Connecticut. It has furnished a supply where there was no deficiency. Content with the ancient standard of school instruction, the people have permitted the expense of sustaining it to be taken off their hands, and have aimed at nothing higher. They expended about an equal sum before the school fund existed. They would willingly pay seventy thousand dollars more, if made a condition of receiving the State bounty, and thus the amount would be doubled, for an object in which they would *then* feel that they had some concern.

In the same report there is a letter by President Wayland, of Brown, University, in Providence, R. I., in which there is the following passage :

It is generally supposed that legislative effort should be directed to the accumulation and distribution of large funds to be appropriated to this object. I am disposed to believe that this opinion is erroneous. Funds are valuable in this case as a *condiment*, not as an *aliment*. They should never be so large as to render a considerable degree of personal effort on the part of the parent, unnecessary. The universal law of divine providence, in the distribution of its favors, is on the principle of *quid pro quo*. The adoption of any other, except in the case of absolute helplessness, is so far as I have observed, pernicious. Witness the effect of funds for the support of the ministry. A fund is only useful, in this sort of case, in so far as it induces men to help themselves. If they help themselves without it, so much the better. As soon as they are aware of the value of education, and it has elevated them to a certain point of moral acquisition, they will not want it ; Nay, if it be continued after they have arrived at this point, I think it may be injurious in its effect. If it, for instance, be so large as to give some sort of education to every one, and every one is sufficiently desirous of education to take it for nothing, but not enough so to be willing to pay for it, a community will soon suppose that it is not worth paying for, and will soon care very little about the thing, and only desire the most meagre representative of it. A fund, under these circumstances, effectually retards education. It may keep a community from absolute ignorance, but it will fatally prevent them from making the exertion necessary to acquire an education of any material value. Nor is this a purely imaginary case. In Connecticut, if I have not been misinformed, this result has already taken place.

The committee of which the Hon. Theodore Frelinghuysen was a member, add :

That the Connecticut system does produce the result of repressing the liberality of the people toward this object of benevolence, and leads them into the habit of relying upon the public money, to the neglect of education in most of their districts, during a considerable part of the year, we have the best reasons for believing. And yet this is the very system, defective as it is, and opposed to the plainest principles of policy, which some amongst us wish to see adopted in New Jersey.

In the same year, (1827,) Hon. A. C. Flagg, Superintendent of Common Schools of the State of New York, in his annual report, fortifies an opinion expressed by him in reference to the schools of that State, that the distribution of money however liberal, is not of itself sufficient to insure the establishment of good schools, by referring to the experience of Connecticut ; and in a subsequent re-

port he holds the following language—"If the mere distribution of money from a State fund, would produce good schools, it might be inferred that those in Connecticut were much superior to our own. But even there, with an ample fund, there is much complaint in regard to the low state of common school education." A few years later, his successor, Hon. John A. Dix, in a report on the common schools of that State, remarks, that the experience of Connecticut shows, "that beyond a certain point, the voluntary contributions of the inhabitants decline in amount with almost uniform regularity, as the contributions from a public fund increase."

In Massachusetts, a vigorous effort was commenced by James G. Carter and others, in 1824, to improve the public schools and other means of popular education. Among the plans suggested was one for the establishment of a school of practical science, to give completeness to the system of common schools and as a nursery for schoolmasters. A committee of the Legislature, of which Theodore Sedgwick, of Stockbridge, was chairman, in reference to the experience of Connecticut, in a report submitted in 1826, remark—"We trust, therefore, that whatever the State shall hereafter think it expedient to do, they will, in no event run into the error of attempting to relieve the towns from the responsibility of taking that care of the schools, which necessarily forces upon individuals, the high and interesting duty of taking care of them, and will adopt no principle of providing for common schools, which does not force upon the towns, as a general rule a proportionate provision on their part." "No school fund could greatly improve our schools, while the instructors are so lamentably deficient. While we would avoid the gross indelicacy of speaking unfavorably of the schools of our sister States, it is due to truth, that we should mention the condition of the schools of Connecticut, to show that we want not only more competent school funds, but also a fund of competent knowledge in the instructors." The foregoing suggestions were heeded, and although the plan proposed by the committee was not adopted in form, the State did a few years afterwards establish seminaries for the education of teachers, and impose increased pecuniary obligations on the towns. And thus in a little more than a quarter of a century—a period of time measured by the lifetime of a generation—the amount of money raised by tax on property for the support of public schools, has more than quadrupled, and the State, instead of becoming poorer by this large annual expenditure, has increased still more rapidly in wealth. The productive power of her people in the workshop, and the fields, and in every form of

labor-saving and power-increasing invention, has been greatly multiplied by the better education given in the public schools. In the meantime, a State School Fund has been established in Massachusetts, but its annual income, instead of being paid to the towns to diminish the amount to be raised there by tax, is paid only on condition that a sum larger than was before raised, shall be levied and applied to school purposes.

We might multiply these references to the estimation in which the school system of Connecticut began to be regarded in States, in which it was once looked to as an example. But we will refer to only one more document of the kind.

In 1829, the Legislature of Kentucky, requested the Rev. B. O. Peers, and Rev. Dr. Woods, President of the University, "to communicate any information which they may possess upon the subject of common schools, and which in their opinion would aid the Legislature in selecting the best system for the State of Kentucky." In the proceedings of that body, in the year following, appears a "Report of the Committee on Education in the House of Representatives," embodying a communication from Mr. Peers, who, it appears, "traveled to New England, and all other portions of the country, where popular education had been made the subject of legislation, that from printed documents, personal observation, and conversation with intelligent men, who could state the imperfection of existing system, together with the remedies which had been suggested, he might present the collective experience of the nation." In this communication considerable prominence is given to the experience of Connecticut.

The experience of Connecticut, is too mature and too rich in instruction as to the tendency of various and opposite modes of encouraging education, to be passed over hastily; I shall, therefore, state some of the changes which her system has undergone, from the earliest period down to the present time.

After alluding to the enactments of 1650 and 1690, Mr. Peers proceeds:

In the year 1700, a law passed which placed the common schools of Connecticut on the foundation where they continued, with little variation, until since the establishment of the present fund in 1795. It was then required that in every town having seventy or more householders, a *constant* school should be kept, and where there were less than seventy, a school should be kept half the year. It was likewise enacted, that the inhabitants of every town should pay forty shillings on every thousand pounds of taxable property, estimated according to a rule prescribed by the Legislature in their general system of taxation, for the support of the schoolmaster, to be collected with the public or county tax; and if any town failed to provide a schoolmaster according to law, this sum to be collected and paid to the county treasury, as a fine upon such negligent town. Where this fund was insufficient to support the school, the deficiency was to be made up, one half by the inhabitants of the town, and the other half by the parents or masters of the children.

The several changes in the details of the system did not originate in any instability of purpose, but were rendered necessary by the delinquencies of certain towns, where, from various causes the existing penalties were insufficient to secure to the laws a prompt and entire execution. The clause in the law of 1700, by which a tax of forty shillings on every thousand pounds was collected through the colony for the support of instructors, and by which *the benefit of this tax was limited to those towns which supported schools the time prescribed by law*, undoubtedly contains the efficient measure which secured the object so long aimed at, the universal establishment of common schools. The tax for schools *being collected with the county tax*, had not the odium attached to it of a fine incurred by delinquencies; while it was attended with all the advantages which such a fine could promise. It was left to the option of the towns, whether they would make the necessary addition to the public money, and expend it for the purpose designated by the Legislature, or after it had been collected, leave it for the common and ordinary uses of the country. The consequence was such as had been anticipated from the law, and schools were every where maintained.

From what is known of the state of the schools, as well as from universal tradition, it appears that the laws were now rigidly executed; a school was brought to every man's door; the poor and even the slave, were always within the reach of instruction; and hence, for more than a century in Connecticut, a native of mature age, who, in the language of the old statutes, "was unable to read the English language," has been looked on as a prodigy.

A scheme which was found to answer thus completely, for nearly 100 years, all the purposes desired, might have been supposed worthy of continuance; but upon the establishment of the present fund in 1795, it experienced a total revolution. The result of the present system, however, in comparison with the former, are far from recommending the creation of an immense fund. Indeed its influence has been evidently injurious. Nothing has been gained as to time by the schools from the operation of the fund, nor have the qualifications of instructors been increased, or the branches of instruction multiplied through its influence. The only end (it can not be called an advantage) gained by the fund, has been relief from taxation. "Where means so ample and imposing are provided, we look, of course, for some unusual and splendid result. To be informed that a fund which enables a community no larger than Connecticut, to expend more than fifty thousand dollars a year on schools, and which will soon afford ninety or one hundred thousand dollars a year for the same object, produces no visible effect, except in diminishing taxation, and that the whole benefit is limited to the pocket, much as we admire thrift and good management, leaves on our minds, to say the least, a strong feeling of disappointment. A school fund, according to the common rules of judging, ought to profit the schools as well as the supporters."

The next remark I shall make respecting the defects of the New England and New York systems of popular education, is, that without some essential changes, they must defeat the patriotic and cardinal object they have in view, viz, the union of the children of all classes, on terms of perfect equality as to opportunities of intellectual and moral improvement.

Indeed they are already, in some cases, particularly in Connecticut, producing that very discrimination between rich and poor, which above all things they aim to prevent, and are accelerating the classification of the members of society, according to their wealth.

The fact of the existence of this tendency, was made known to me by the acknowledgment and complaint of every intelligent gentleman I met with in Connecticut, and the reasons for it are obvious. Education in the free schools, has, in reality, been so much cheapened in more senses than one, that all those who can help themselves, will not accept of it, even as a gratuity, and are consequently providing select private schools for their children, in which, by the payment of liberal salaries, they engage the services of men of talents and attainments.

The only possible way in which this separation of the children of the rich and poor, and the existence of two sets of schools, plebeian and patrician, can be prevented, is, to make the State schools such as will satisfy the rich, in short, the best that can be had. To accomplish this, it is indispensable that it be made the

interest of men of talents, to fit themselves for the business of instruction as a profession.

Look at the schools of Boston, the pride of that literary capital, and the acknowledged models for the Union.

At the head of these institutions, public and private, you will find gentlemen of the first respectability for talents and acquirements, almost without exception, college graduates; some of whom have even abandoned the profession of medicine and law for that of teaching; and why? The answer is obvious. Because it was their interest. The salaries of those engaged in the service of the city, vary from \$800 to \$2,500 per annum, whilst many of the proprietors of private schools, receive 80 and 100 dollars a year for tuition, from each of 80, 100, and in some cases 150 pupils.

Contrast with this the state of things in Connecticut, where about the time of Thanksgiving, the roads will be lined with young cultivators of the soil, who, not being able to find in winter employment for their hands, intemperate the country, vending the services of their head to the highest bidder, and accepting of salaries of from five to twenty dollars a month.

In the one case you will find a proud and honorable satisfaction with their schools; in the other, universal complaint, societies for the improvement of common schools, petitions to the legislature for reform, a dissatisfaction with the effects of their fund, almost amounting to a wish for its annihilation, a drain of scholars from the public to the private schools, and the aristocracy of wealth, fortifying itself by becoming an aristocracy of literature.

These representations, so far from operating against the interests of the poor, are expressly designed and calculated to promote them. If it be true, that "knowledge is power," and that there is the connection asserted between liberal salaries and the employment of talents, and between the employment of talents and good education, whose fruit is knowledge, how, I would ask, can the unsuspected ascendancy of the rich be more effectually secured, than by putting off the poor in means, with the present of a poor education? Only allow the rich, (no matter under what pretext, whether of philanthropy or patriotism, or interest,) to prescribe the education of the poor, and they prescribe their condition and relative importance. If any thing be anti-republican, it certainly is so, directly or indirectly to maintain, that although a hundred dollars a year is not too much to expend for the mental improvement of the son of the wealthy merchant, lawyer and physician, a two dollar education, (the estimated cost of public school instruction in Connecticut,) is quite sufficient for the children of the poor, or in other words, the mass of our fellow-citizens.

I conclude, therefore, that if the aggregate property of the community is so far a common fund, that it is responsible for the instruction of all its children, then it is peculiarly the interest of the poor, that the education imparted, should be of the very best character; for if a liberal expenditure of funds be necessary to secure it, it is not from them, but from the property and property holders of the country, that these funds must be obtained.

This language is widely different from that in which the system of our State was spoken of in a legislative document of Kentucky, in 1822. "The Connecticut system originated more than one hundred and fifty years ago, and having undergone a variety of modifications has become an example for other States, and the admiration of the Union."

On the 10th of November, 1830, a Convention of Teachers, and other friends of education was held in Hartford, of which Noah Webster, LL. D., was president, S. H. Huntington and Asa Childs, secretaries; and Rev. T. H. Gallaudet, Dr. J. L. Comstock, and W. M. Holland, Esq., committee of arrangements. Addresses were delivered by Rev. Dr. Humphrey, President of Amherst Col-

lege, by Rev. Gustavus F. Davis, of the Baptist Church, Hartford, on the qualifications of teachers; by Dr. Webster, on the English language; by Dr. William A. Alcott, on the location, construction, warming and ventilation of school-houses, and by Rev. William C. Woodbridge, on the introduction of Music into common schools. The convention was numerously attended, the lectures were able and practical, and the discussions animated. Nearly all the addresses were subsequently repeated in other parts of the country, published and widely circulated. The same good seed, scattered elsewhere, was followed by a more immediate and abundant harvest, than in our own State; although there is reason to believe that the convention accomplished a good purpose here, by leading to inquiry and discussion. The address of Dr. Humphrey excited much interest, and Rt. Rev. Bishop Brownell, Hon. Timothy Pitkin, and Rev. Charles A. Goodrich, were appointed by the convention to request a copy for publication. The following extracts are taken from the printed copy:

Our ancestors knew that a privilege which costs the people nothing, is never duly estimated, and is never improved to the best advantage. Accordingly, while they raised moderate sums for the support of their schools by general taxation, so as on the one hand to encourage and help the poor, they would not, on the other, place those schools on such independent ground, that they could be sustained without individual efforts and sacrifices. Every district was laid under the necessity of resorting to some kind of assessment, for the support, in part at least, of competent instructors. Many parents were obliged to make very great exertions to pay their district taxes; and all felt a deeper interest in the improvement of their children than they would have done, had the whole expense of schooling them been defrayed from the public treasury.

The strong interest which our fathers felt in the prosperity of their schools was manifested both in the choice of teachers, and in a kind of spontaneous general oversight. As they had to pay money out of their own pockets for schooling, they wanted instructors who would earn their wages, and they were accustomed to keep their eyes upon the master all winter. If he was idle, they knew it. If he was indifferent about the proficiency of his scholars, they marked it. If he was incompetent, they were not likely to employ him again. They were in the habit of visiting the schools often, that they might know their condition and mark their progress, in every branch of study. They taught and questioned their children in the long winter evenings at home; and in various other ways co-operated so actively with the teachers, that much was accomplished in a little time. To say that a great part of this productive stimulus, emanated from the district assessments already alluded to, is only saying, that human nature was the same then as it is now. It required that kind of excitement which all the school funds in the world can never produce.

Long within my own memory, the common schools of Connecticut, were thought by well informed strangers, as well as by our own citizens, to be in a more healthful and flourishing condition than those of any other State in the Union. Do they still retain this enviable pre-eminence? Who will venture to answer this question in the affirmative? One thing is certain—the opinion extensively prevails, both at home and abroad, that your primary schools have been for years on the decline, while those of some other States have been in a rapid advancement. You, gentlemen, have now assembled to inquire into the causes of a deprivation, so unfavorable to the character and prosperity of Connecticut, and to devise ways and means for restoring her to her proper rank in the great republic of popular education.

The *great* cause, then, of apathy and decline, is, in my deliberate judgment, to be sought for, in your princely school fund. And here I am sustained, as you well know, by the voice of many of the most enlightened friends of education in the State. If I am right, the honor of the discovery belongs to them, and not to me. If I am wrong, I err in common with men, whose opinions have always been considered as entitled to great respect. I revere the memory of those civil fathers, who in disposing of the Western Reserve, resolved to consolidate the avails into a permanent fund, for the encouragement and support of schools. It was a noble design. And though I have sometimes regretted that the academies can receive no aid from the fund, I am by no means sure, that the exclusive appropriation of the income to common district schools, is not the wisest and best that could have been made. I honor the men, who have hitherto managed this great fund, with so much ability, integrity, and success; and if any means can be devised to make it raise the standard of common education, which it certainly ought to do, I should be glad to see the amount greatly increased. But as matters now stand, and as the income is annually distributed according to law, I am persuaded, that the benevolent intentions of those who established the fund, are frustrated. The children of the State would be better educated without it.

There are no such uniform and stubborn truth-tellers in the world, as facts; and what is their testimony in the case before us? If this testimony has not been most erroneously reported, there is a prevailing indifference with regard to the standard of common education, which is humiliating and alarming. A school is kept in every district, long enough to expend the public money, as a matter of course. But how obvious a decline of interest is there among the great body of the people. How much less particular are parents and school committees than they used to be, in the selection of teachers. How much more essential is the qualification of *cheapness*, in the opinion of many, than almost any other. How few and far between, are the visits of parents to the schools of their respective districts, and how remiss are they, for the most part, in the duty of superintending the evening studies of their children at home. I appeal to the members of this Convention, whether the question, "How long will the public money last?" is not far more common, than, "How long ought the school to be kept?" How good an education are we bound to give our children considering the age and country in which we live?"

Very many, if I am not much mistaken, rely upon your noble school fund to do every thing for their families, whether the teachers whom they employ are qualified, or unqualified—whether their children go to school, or stay at home. Your two millions of dollars, appears to be regarded by multitudes, as an immense water-power, which has been gradually accumulated from a thousand rills, under the eye and direction of the most skillful civil engineers in the State, and which ought, in all reason, to propel the whole machinery of education, without any other superintendence, but that of your worthy Commissioner and Treasurer at the penstock. And they marvel, that with such a momentum, any of the wheels should move sluggishly.

The truth is, that more than twice as much is necessary to give them a tolerable education; and of course the schools can never flourish—can never be well taught, even during half the year, where additional funds are not raised in one form, or another. How shall they be raised? Several practicable methods will occur to every mind. Each school society may be employed to tax itself to any reasonable amount, as is the case in Massachusetts—or each district may agree to raise so much upon the scholar—or when the public money is expended, a subscription paper may be circulated for the signature of all those who are willing to continue the schools longer. Either of these methods is far better than an entire dependence upon the fund. But there is another still, which appears to me to promise much more general and efficient aid to the cause of popular education.

Let your enlightened legislature, after the example of the State of New York, pass a law, requiring every town to raise a sum for the support of common schools, equal at least, to what it draws from the public treasury. Such a law, I have no doubt, would work wonders. It would wake up an interest which is now unfelt. It would make parents every where feel that they have something to do. It would enable the districts to offer liberal wages, and to continue their respective

schools much longer than is now customary. In this way, your public funds might become a great public blessing. It would do all that a fund can do. That is, it would help the people by encouraging them to help themselves.

Now till something of this kind be done, to give a new and more healthful turn to your school system, I apprehend it will continue to languish, in spite of all the ordinary stimulants which can be applied. You may exhort the people, as earnestly as you will, to cast off their apathy and put their hands to the work of resuscitation. You may give a new change to your committees and visitors every month, and they may discharge their respective duties with commendable fidelity—but till you can reach the main-spring of general action—till you can rouse the dormant and mighty energies of a free and intelligent population, the common schools of Connecticut can never again assume that pre-eminent rank which they so long and so proudly held in the noble rivalry of popular education.

Much, undoubtedly, can be done, to wake up the slumbering, and to inspire the phlegmatic, by free and animated discussion in your public journals; by State and local conventions; by fervid and reiterated appeals to parents, teachers, and school visitors; but these and such like means, (excuse me for once more repeating,) will prove insufficient. Nothing quickens the great body of mankind, like a desire to get the worth of money which they pay out of their own pockets. Oblige them to settle with the schoolmaster, in part, from the avails of their own farms and shops, and they will take care whom they employ—but release them from all pecuniary responsibility, and they will merely inquire, "How long will the public money last?"

The proposition to return to the old Connecticut system of property taxation for the support of the common schools was not favorably received by the tax-payers.

In 1831, governor Peters in his message remarks :

A proper inquiry at this time will be, whether this large amount (the revenue of the school fund) has been applied in the best manner, and has produced the greatest possible benefit to the rising generation. That it has not produced that result is obvious to all who have observed the indifference with which the apportionment is made, and the subject of education is regarded.

The general apathy, the deficient qualifications of instructors, and the neglect of parents and guardians to sustain them in regulating and governing their schools are the causes of much of the evil that hangs so injuriously upon our system of common school education.

The governor thinks that "a tax of one cent on the dollar of the assessment list, collected and paid for the benefit of the district," would remove most of the causes above enumerated. During the session of the Legislature, evening meetings were held in the State house, at which a report of the proceedings of the Convention of 1830, and a statement of the condition of the common schools, as gathered from communication of school officers, and practical teachers, was read by Rev. G. F. Davis, of Hartford, and Hon. Roger Minot Sherman. The subject attracted but little attention in the assembly, while the claims of the colleges found eloquent and efficient advocates, and a grant of \$10,000 was made in their behalf. From the statements above referred to, and the returns submitted to the General Assembly in 1828, a pamphlet of sixteen pages was made up and published with the title, "Common School System of Connecticut."

From this document the following statistics and statements are taken, as exhibiting the practical working of the school system at this period.

We have more than once expressed our conviction, that the condition of education, in this State, when compared with improvement in other respects, is no better than it was before the fund was provided, nor even as good. Instruction had, indeed, been in a very excellent condition for a long period. For sixty years, not an individual was known to appear before the courts of justice, who could not write his name. The effect of this fund has been that which may always be expected, where he who is able and habituated to earn his own subsistence, is supplied with the means of living without exertion. The State, by its bounty, has virtually declared that parents need no longer pay for the instruction of their children, (that is, for their tuition;) and the habit, and the sense of obligation to do this duty, were destroyed together. The State has been made exclusively responsible, and it has, too extensively, been deemed sufficient to provide such teachers as the fund would pay for.

We beg our readers to understand, that in these, and the following statements, we refer to the *majority* of the 1600 school districts of Connecticut, and *not to all*. We know that there are *many*—we hope *several hundred, honorable exceptions*; and it is worthy of remark that (other things being equal) those districts, which either from necessity or choice, depend most on their own exertions, have the best schools.

The visitors receive no compensation for their services. Those who are most "competent," after a few years of laborious, and sometimes thankless service, generally decline a re-appointment; and the result is, that the board is often composed in part of men, whose want of knowledge, or ignorance of the theory and practice of teaching, unfits them for the employment. Of course, the duties of school visitors are either neglected, or attended to as a mere formality.

In those societies where the spirit of improvement is beginning to prevail, the visitors meet soon after their appointment, organize themselves, and adopt certain rules to regulate their proceedings. They determine the standard of qualifications of instructors, and give notice of the times and places of meeting for examinations. At those meetings, the candidate undergoes a thorough examination in the various branches of an English education which their rules require him to understand. But these examinations are wholly of a *theoretical* character. The object is merely to ascertain what the candidate *knows*, not whether he can *communicate* his knowledge. We are acquainted with one society, however, in which the visitors make it their practice to require a candidate whom they are disposed to approve, to teach one month upon trial; when, if found competent to his task, they license him; if not, he is rejected.

But in by far the majority of cases, the visitors hold no regular meetings for examining teachers, nor adopt any rules for their own conduct. If the candidate, either alone or with the aid of the committee who employs him, can collect two or three of their number, they proceed to examine him, but their examinations are often a mere formality; for if he is a favorite friend or acquaintance, either of the district committee or the visitors, or if he has ever taught before, he is licensed almost of course. At most, he is only questioned on the spelling-book and the ground rules in arithmetic, and required to read and write a few sentences.

These remarks, however, apply particularly to arrangements for winter schools; for there is still less attention paid to the qualifications of the female teachers of summer schools. It often happens, that they are not examined at all; and they are still more rarely visited as the law requires. At the same time, the teacher is paid from the public fund, to obtain a share of which the society's committee are accustomed to certify that the schools have been kept in *all respects according to law*!

But the visits even to the winter schools, though less frequently omitted, are rarely of much consequence. Although invested with power almost unlimited, as we have already seen, they seldom exercise any considerable influence over the concerns of the school, either to aid in the classification of the pupils, in the direction of their studies, or in recommending proper books, or modes of instruction.

They merely enter the school, spend a short time in hearing brief recitations in the various branches, and just glancing at the writing-books, slates, &c.; then, after making a few common-place remarks, they retire. This duty is also sometimes performed by a single visitor, although the law expressly requires at least two. However deficient the instructor may be found, we have known but one instance of displacement at these visits; and that was not justified by public opinion. Besides, these visits seldom occupy more than one-fourth of a day, while it is impossible to form a just estimate of most schools in so short a time. In some instances, the visitors make it a point to visit three schools in half a day!

Not only are those, whose special duty it is to oversee and direct the schools, justly chargeable with neglect; but *parents* manifest a great want of interest in the subject. Months sometimes pass without a single parent's entering the school. Or if he enters, he retreats as soon as possible, as if it were a burden to remain. Parents seldom have any intercourse with the instructor, except while he is boarding in their families. They may sometimes be induced to visit the school, if the instructor gives a special and general invitation. Even these invitations are, however, almost wholly disregarded in a majority of the districts in the State, unless notice is given that dialogues will be spoken, or other extra performances take place. In such cases a considerable number attend. A gentleman who has often obtained permission of teachers to inquire of their scholars whether their parents ever converse with them at home on the subject of their studies, says it is not uncommon for a whole school to answer in the negative.

Summer schools are usually opened in May, those for the winter in November. But in many parts of the State, the winter school does not commence before about the first of December; and the summer schools are often either suspended, because the public money is exhausted on the previous winter school, or established by a feeble and stinted contribution, for a short time only.

Nothing more strikingly evinces the paralyzing effect of a large fund, *as it has been hitherto applied*, then the indifference which prevails almost universally in regard to setting up schools. When the district committee warn a meeting, only a small proportion of those concerned can, in ordinary cases, be induced to attend; and within a few years it has often happened that a sufficient number could not be collected to transact business in a proper and legal manner. When, however, the people of a district are collected, their inquiries, so far as regards a teacher, are not generally, 'Is he qualified?'—but 'what are his terms?' and 'can he get a certificate?' It is usually understood that the committee, in selecting the candidate, will keep principally in view the amount of money likely to be received from the State treasury and the society fund, (when one exists) and employ an instructor for such a length of time, and on such terms, as will just absorb that sum and no more. Indeed they are often directed to this effect by a vote of the meeting. If a small sum is to be raised by taxation to complete the payment of the expenses at the close of the term, it is usually paid with far greater reluctance than the whole expenses were paid before the year 1795, when no fund existed. It is also a well-known fact, that before that period, it was customary to continue the schools nearly as great a proportion of the year as at present; and the interest which parents and the public at large manifested in their welfare, was incomparably greater.

The long vacation of spring and autumn, besides occupying for the most part those portions of the year in which it is most pleasant and agreeable for children to attend school, have a very unfortunate effect. Children lose much of the knowledge which they had acquired during the previous term; and several weeks are taken up at the least, in regaining what they had lost.

Male instructors are usually employed in the winter, and females in the summer. They generally board in the families of the district, by rotation. This gives them an opportunity of becoming partially acquainted with the parents of the children committed to their charge, while on the other hand it exposes them to many inconveniences; and even in some cases, endangers their health. Besides, it often happens, that they are left destitute of a regular boarding-house for a day or two, as no one is prepared to receive them—in consequence of which they are forced to repair to the house of the district committee, or, if extremely sensitive on this point, to their own home or the house of some friend.

The average compensation, in addition to board, is about \$11 a month for male

teachers, and a dollar a week for females. Many females, however, of considerable experience, teach at 75 cents a week; and some whose experience is less, at 62½, or even 50 cents.

One of the greatest evils which exists in connection with the common schools of Connecticut, is a *perpetual change of teachers*. It is, indeed, the general belief in the country towns, so far as we can learn, that *it is better for the school to exchange often*. We are inclined to think this opinion, has, till recently, been extending in that State; for 30 years ago, it was more common for an instructor to be employed two successive seasons in the same school than now.

There is a great want of punctuality and regularity of attendance on the part of the pupils. This arises from various sources. One principal cause is the neglect or parsimony of parents. Another is their ignorance of the loss which the pupil actually sustains by late attendance or by absence, and the inconvenience to which it subjects the teacher and the class to which the pupil belongs.

The whole number of pupils who attend the winter schools, is, upon the average, about 40 to each school; the number in attendance in summer is much less. However great the number of pupils—and there are sometimes 80 or 100,—only one teacher is allowed. There are a few exceptions in some of the larger towns, where a female assistant has been employed, especially during the winter. The great benefits which have resulted from this arrangement, and even its *economy*, seem, however, to have attracted but little attention.

The size of school-houses is generally much too small. We often find 50 or 60 pupils crowded into a room, twenty feet square, or twenty by eighteen feet; of which number, 30 write, 20 study arithmetic, and a few, grammar and geography; and within these narrow dimensions, all the evolutions of the school, and the arrangement and disbanding of classes, are to be performed, and room found for that display of rules, and inkstands, and slates, and pencils, and maps, which those studies commonly involve. Added to all this, the instructor's table or desk, and a stove, when a fireplace is not used, are all comprehended in the same space; and to crown the whole, the outer clothes, hats, &c., of half a hundred pupils, with their baskets of food and drink, are sometimes deposited in various parts of the school-room. How is it possible to proceed with the appropriate exercises of the school, engaged in this manner?

For want of due attention to temperature, the pupils are often annoyed by the extremes of heat and cold. The wood is not commonly kept under a covering, but is left in the open air, and is frequently encrusted with ice, wet with rain, or buried in snow. Sometimes it is quite green. At other times, it is cut too long. The latter is a very common evil. But it is an evil which resolute teachers and scholars know how to overcome more readily than that of having no wood at all, which sometimes occurs. In some cases, schools have been discontinued several days for want of fuel.

Greater attention ought also to be paid to the location and external arrangement of school-houses. They are usually placed as near as possible to the centre of the district. Stagnant marshes and ponds, or what is scarcely less injurious, sandbanks, in their immediate vicinity are by no means uncommon. Some are even placed in close contact with pounds and prisons, whose moral influence on little children can not but be unfavorable. There is another evil, whose *immediate* results are of still greater magnitude. Standing as a majority of school-houses do, contiguous to dwelling-houses, and barns, and inclosures, and fruit trees, and gardens, serious difficulties are apt to arise between the scholars and the owners. Fences are apt to be thrown down, herds or flocks frightened, fruits pilloined, &c. In seeking to avoid or prevent these and other kindred sources of evil, it is not necessary to go to the other extreme, and locate our school-houses in a wilderness or desert. But we can not avoid insisting on the indispensable necessity of selecting airy, shady, healthy situations; and avoiding villages and public roads, which expose to noise and dust, as well as to scenes of immoral and sometimes indecent example, whether in the centre of the district or not.

A few districts in the State are, even now destitute, of any school-houses at all. In one of the oldest, if not one of the wealthiest towns, there were in 1830 several instances of the kind. One of the schools occupied a chamber in a dwelling-house; another a very small shoemaker's shop, badly constructed, and poorly lighted.

The want of any proper play-ground is, it is believed, a universal evil. The pupils are compelled to exercise in the school-room, or in the open public road or highway. In the former case, frequent injury arises to the books, the benches, the desks, and the windows. In the latter, the utmost possible vigilance on the part of the teacher is scarcely sufficient to keep them from being covered with mud or sand, or from getting into fields, and exciting the prejudices and even hostility of the neighbors. No fact can be better proved than that half of the difficulties, in many schools, between parents and teachers, and their pupils, have their origin in these circumstances; and that consequently half the threats, and punishments, and painful feelings, and hatred of books and study, which exist, might easily be prevented by a proper attention to this subject, and without involving much additional expense. We are even of opinion that in country towns, where land is cheap, a play-ground of suitable size, would cost less than the additional repairs of windows and furniture, for the school-room, and the additional books and washing of clothes, which are otherwise demanded. In these, and in all points relating to the education of the young, no maxim is more important than that *prevention* is better than *remedy*, and that the greatest economy consists in providing every thing which is necessary to accomplish, in the best manner, the great objects we have in view.

The usual hours of instruction in the schools, are from nine to twelve o'clock in the forenoon, and from one to four in the afternoon, with a recess of from five to fifteen minutes during each half day. In some of the cities and large towns, this arrangement is varied, but the whole amount of time devoted to study is the same. There is a vacation for one Saturday afternoon of each week, or for a whole Saturday once in two weeks, and in a few instances the school closes an hour earlier than usual on each Wednesday.

Spelling, reading, writing, and arithmetic are taught in nearly every school. Geography and grammar have within a few years been introduced very extensively, but in many places not without great opposition. Even arithmetic, until within a few years, was excluded from many schools during the day, and only permitted to be taught in the evening schools. Grammar and geography were opposed, but with less violence; and it is worthy of remark that an additional higher branch can now be introduced into a school with far less difficulty than formerly.

When the report was made to the Society for the improvement of common schools, there were in use in Connecticut, *eight* kinds of spelling-books, *twenty-nine* reading books, *eight* arithmetics, *six* grammars, *ten* geographies, and *five* histories. The number of *different* books in use, has probably been doubled since the above report.

The selection of school-books, is sometimes made by the teachers, sometimes by the board of visitors; but more commonly by chance, rather than the choice of any one. The parents send such books to school as they happen to possess, and the pupils use such as are the most numerous. Most of them are quite beyond their capacities.

The *alphabet* is usually taught in course, beginning, at each lesson, with the capital A, and proceeding to &, and some teachers go through with the row of small ones, and also the double letters at the same time. Others make it a part of their plan to invert this order, beginning with the bottom of each row, and ending at the top; and others still, teach them promiscuously. The teacher points to each letter, and requires the child to repeat its name after him, and this is done from day to day, till the child can recollect them in their order and place. There are two lessons in each half day; and during the rest of the time the child is compelled to sit still without employment.

When the alphabet is acquired, the next step is to reading words, and *spelling* them. Some instructors require their pupils in the first place, to read through nearly all the tables of words in the spelling-book. But in a majority of instances, after reading a few words, the teacher takes the book, pronounces the words, and the pupil, with more or less aid, spells them. In either case, by hearing the higher classes in the school spell them from day to day, and by having his attention less directed to reading than spelling, he learns to spell words much faster than he learns to read them. But he learns mechanically; for he rarely connects or associates a single *idea* with a word, any more than if he were committing to

memory tables of Latin or Greek. It is in this way that we are to account for the fact, that on visiting a school, the pupils are frequently found able to spell by column nearly all the words of the book, while the best of them will misspell a great number of words, when they attempt to compose a *letter*, or *write from dictation*. Defining is very much neglected throughout the State. Few schools pay any attention at all to the subject. A certain number of columns is usually assigned as a spelling lesson, which the pupils are required to study over and over; and, at a certain hour, the teacher pronounces them with as much rapidity as possible. The pupil is generally allowed to spell at a word but once; if he errs, the one who is next in the class spells it if he can, and '*goes above him*.'

Reading, as most commonly conducted, consists in pronouncing correctly the *words* of a given sentence, verse, or paragraph. With larger classes, half an hour is sometimes spent in this manner. In some instances, the pupils are taught to observe, with a measured accuracy, the pauses which occur, and still more rarely, to imitate the inflections, tones, and emphasis of the teacher. The number of teachers who make any considerable effort to have their pupils 'read as they talk' is but small, though probably increasing.

Writing is much neglected. The pupils are often furnished with paper and ink of a very inferior quality, and generally they receive very little effective instruction. The teacher 'sets a copy,' or furnishes the pupil with a copy-slip, makes him a pen, and then, in the midst of a multiplicity of other employments, after giving him a few general directions, is obliged to leave him to hold his pen and choose the position he pleases. A few schools in the State are furnished by the committee with paper, quills, and ink, of the best quality, (the paper carefully ruled,) and with the most obvious advantage.

Arithmetic is generally taught by putting Daboll's Assistant into the hands of the pupils, and requiring them to *commit the rules to memory*, and *perform the sums*. In doing this, the great object of the pupil seems to be to *get through the book*, rather than to understand it; and what he does not seek, he will not be apt to obtain. Colbourn's Mental Arithmetic is beginning to come into use, but it has usually been taught in a manner by far too mechanical.

Grammar and geography are committed to memory rather than taught, for after years of study in those schools where they are permitted, the pupils often have little or no practical knowledge of either, especially the former. This is partly owing to the fact that the books themselves are not usually adapted to the pupil's capacity, partly to the ignorance or inexperience of the teacher; but it partly arises from the want of system. It is by no means uncommon, on entering a school, to find the instructor attempting to hear a class read, to set copies, mend pens, examine some of their slates, and preserve order, all at a time. In a few schools, such a division of the time has been made, that only one branch is taught at once. This change, whenever adopted, has been productive of the most satisfactory results.

In the study of geography, maps and atlases are now generally used; but until within a few years, there were numerous exceptions. The books used, as above stated, are generally such as the pupils happen to possess; and of so many different kinds, and editions, as to give rise to much trouble, both to pupil and teacher.

Globes, blackboards, and apparatus, are almost unknown in the district schools of Connecticut. In a few instances where they have been introduced, their *utility* and *economy* has been satisfactorily proved; but of the few who have seen or heard of them, the greater part dread expense, and fear innovation.

But the order of the exercise is objectionable, even in most of the best schools. The morning is devoted to reading and writing, which are branches by no means demanding (at least, as they are now taught) any considerable mental effort; while arithmetic, grammar, geography, &c., which require much hard thinking, are deferred to a later hour. Another evil exists. The smaller pupils are frequently instructed last; that is, not until they have been in the school an hour or two, and have become fatigued and impatient of restraint.

Nothing is more important than to provide pupils with constant and pleasing employment. If they are not usefully employed, they will be doing mischief almost of course; and no means can be effective in governing a school, without keeping the pupils occupied. While, however, a few instructors adopt this prin-

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ciple, and act accordingly, the mass of the smaller pupils in the schools are almost constantly without any employment. It follows that much of the teacher's time must be wasted in keeping them out of mischief, or punishing them for doing it; besides involving an immense loss to the pupil, whose time *might* be spent in acquiring knowledge.

In short, the great object *seems* to be to go through with a certain amount of *processes*, and commit to memory a certain amount of words and sentences, in the various branches, with a kind of confused idea that the knowledge will be the necessary result. The number of children who are trained to *think*,—to *teach themselves*, and to study *things*, rather than *receive* into their minds a mass of words, which they can not understand, or ideas which they know not how to use or apply, is by no means large.

Although mild means of government are more common than formerly, yet the severer measures still to a very great extent prevail. Of ten schools in a certain society, in the summer of 1830, *rods* were kept in view in *seven*, and a ferule in *one*. The fear of punishment is certainly the principal motive used to enforce good behavior; as the rewards which are offered are generally out of the reach of any but a few of the best minds. As motives to induce attention to study, emulation in its most objectionable forms, and the fear of punishment, are most commonly employed. A few instructors appeal to their desire of pleasing their parents and teachers, and a still smaller number endeavor to implant the love of knowledge for its own sake, and present no other motive. I have known one or two instances of the latter kind, which were attended with the most complete success; but they are extremely rare.

Health is greatly overlooked. The small pupils are required to sit on benches without backs, and those who write, sit at desks quite too high. Both these evils result in great injury to the spine, and some of the internal organs of the body, which will sooner or later be felt, even if the cause should be unknown or forgotten. It is gratifying to find, however, that in some parts of the State, these evils are beginning to be remedied. Seats with backs are ceasing to be wondered at; desks which are much lower than formerly, and entirely separate from each other, are occasionally found; and the public sentiment is in many places entirely in their favor, as it is obviously a matter of *economy*. Still, it is customary to keep the pupils sitting too long at once. They ought to stand occasionally, or march around the room; and they should be required to exercise a few minutes in the open air, once an hour, at least. But their health is often exposed by being permitted to come into the house when excessively heated by exercise, raise a window, and sit exposed to the current of air passing through it; or, what is almost equally injurious, drink large quantities of very cold water. The pupils are often in a profuse perspiration when they leave the school at its close towards evening, and are thus exposed to colds, and the long list of diseases which follow in their train.

There are few school libraries in Connecticut. I have seen *two* or *three* but they were furnished solely at the expense of the teacher. The school library recently burned in one of the school-houses in New York was valued at \$600. There are not far from 200 school societies in Connecticut, embracing from 1500 to 1800 districts, while I am not informed of the existence of more than one library furnished by the proprietors of the school, in the whole number. Instead of \$600, in a single school, I believe the whole value of all the common school libraries in the State would not, in 1831, exceed \$60.

Of the numerous works on education which have appeared within a few years, some of them truly valuable, few are read by parents or instructors, even by those who admit the importance and the necessity of elevating the condition of primary schools. Still more rarely do they gain access to any periodicals devoted to this subject.

In regard to moral and religious instruction, little can be said. Although there are some sad exceptions, the character of the teachers is generally good, so that the pupils may derive benefit from their example. Little direct moral or religious instruction is given except by means of catechisms; and this exercise, as I have already observed, is now uncommon. The Bible is generally read once a day in school, but in most cases it is merely as a *reading book*; and it is neither revered, nor generally understood.

The correctness of the views set forth in the foregoing extracts are confirmed by documents proceeding from other sources. In an "*Address to the parents and guardians of children respecting common schools in Windham County*," prepared by a committee, (George Sharpe, Samuel J. May, and Jonathan A. Welch,) appointed by a County Convention held in the autumn of 1832, are the following statements :

It was the undivided opinion of all present, that the obvious insufficiency of our schools to accomplish the purpose, for which they were instituted, is owing not more to the want of science, skill, method, and fidelity on the part of the teachers, than to the too general indifference of the parents and guardians of children, and their slowness to co-operate with the teachers and school visitors.

Your reluctance to attend the meetings of your school societies, and of your districts ; and the manner in which you too generally transact the business of these meetings, would alone sustain us in all we have said. How often are heard excuses like these : "The meeting can do the business without us, and we may as well stay at home. We care not who are chosen on the district or visiting committees if we are not." Is this an exaggerated expression of the indifference which is really felt by you generally ? You would not however be thus reluctant to attend a political meeting, or one respecting a road ; yet the business of such meetings, might be done as well without you, as could the business of your school society or district. Is it not then evident, that you take a more decided and immediate interest in other concerns, (really of less moment,) than you do in the education of your children ? If you felt as you ought to feel in respect to this, would you, could you voluntarily be absent at a time when the community, in which you live, will be called upon to elect the public guardians of our highest and most boasted privileges ? Would not you rather be very careful to be present, and exert yourselves to secure the election of the most judicious and faithful men, that can be prevailed on to accept the charge ? And would you not show at least so much interest in the welfare of schools, as to require from those to whom you have committed the care of them, a full report of their condition and prospects ?

But we have other facts to alledge against you. Your school-houses, many of them, are not suitable for the purpose. Some of them are miserably contrived ; others are not half large enough for the accommodation of the pupils ; many are so poorly built that they can not be kept comfortably warm ; and none of them are properly ventilated. The impure air of your school-rooms is of itself enough to impede the improvement of the children, if not to impair seriously their health.

And when your school-houses (such as they are) are fitted up for the winter ; and your schoolmasters (such as they are) are set to work in them, there you leave them with your children, thinking, as it would seem, that now you have no more to do for them. But how unlike is this to your wonted prudence and watchfulness in every other concern ? What wise and judicious men ever intrust important business to hired servants without carefully inspecting their labors from time to time, to see whether they be diligent, faithful, and successful ; and whether they earn their wages ?

How conclusive then against you, parents, is the fact attested to by nine teachers out of ten, that very few of you, often not a solitary one has visited the school in your district from the beginning to the end of the term ! Your neglect in this respect is indeed a topic of very general complaint ; for it is believed that you might so add the weight of your influence to that of the teacher's, as to impress deeply upon your children the importance of the purpose, for which they are placed under his tuition.

And here permit us to ask, are many of you in the habit of doing what you may, while your children are at home, to assist their progress ? Do you often, do you ever, question them about the branches they are studying ? Do you take pains to give them familiar illustrations of the truths to which their attention has been

called ; or to show them the useful applications they may make of the learning, they are sent to school to acquire ? Nothing, we are persuaded, nothing arouses the minds of the young more than this, and inspires them to generous and successful efforts in pursuit of knowledge. We fear you are negligent in this particular also.

Is it not, moreover, too true that you are generally reluctant to incur any expenses for new books and school apparatus ? Some children, whose parents can not plead poverty, are destitute of the most common books ; and whenever the introduction of others is proposed the voice of complaint is loud and long.

One more fact, it is our painful duty to alledge, in proof that our schools suffer greatly through your neglect. It is this. Your children are neither so punctual, nor so regular at school as they might and should, be. Few probably are aware how much time is thus lost. Could accurate returns be obtained from all the districts in the county, you would all, we believe, be astonished at each other's inattention in this respect. In one society, which is not thought to be less interested in education than others, we have ascertained, that last winter (reckoning the time lost by tardiness as well as absence) only half the pupils attended school about half the time ; and the rest in less proportions even to one tenth ? If it be so generally, and we fear it is, you, parents and guardians, must be to be blamed.

In 1832 a committee appointed by the school society to locate the site of a school-house, were authorized to determine by metes and bounds the quantity of land necessary, and to assess the true value to the owner or owners of such land ; and on the payment of such valuation the land was to become the property of the district. Appeal was allowed from the doings of the committee to the county court, who were empowered to grant such relief as should seem to them just and reasonable. This provision was repealed in 1833.

In 1834, Governor Foote introduces the subject of common schools in the following paragraph :

While our system of primary schools, and the liberal provision for their support by the large fund consecrated for that purpose, which secures the advantages of education to every class of our citizens, has furnished a model for our sister States, it claims our unremitting care, and anxious inquiry, whether it has not been considered so perfect, and been so much admired, as to produce too much confidence in its beneficial results, without the fostering care of the Legislature, to improve the system, and keep pace with the march of mind, and the improvement of the age ; this subject is respectfully recommended to your serious consideration.

At this session (1834,) Thomas Day, Roger Huntington, and Wilbur Fisk, were appointed a committee to inquire whether any, or if any, what alterations in the laws of this State relating to common schools are necessary to raise their character and increase their usefulness. This committee submitted a report drawn up by President Fisk, to the Legislature in 1835, from which the following extracts are taken.

That their examination into this subject has resulted in the conviction that the general condition of our common schools is such as to require some legislative action, in order to give them the character and secure the benefits, which may be reasonably expected from our advantages and resources. When the subject is viewed in reference to the state of primary instruction among our neighbors, such action appears more especially necessary ; as they are making vigorous and suc-

cessful efforts for improvement. A position absolutely stationary will be relatively retrograde. If we extend our view across the Atlantic, and fix it upon the system of instruction adopted by Prussia and Germany, and the improvements in progress there, (as well as in France and Great Britain,) where "the highest point of excellence of one age has been made the starting point of improvement by the age succeeding," the disadvantages of a stationary condition will be still more palpably apparent.

The only substantial basis of improvement is experimental knowledge. We have had experience, but it has not profited us because it has not been collected and preserved. It has been lost before it could be applied for the purposes of improvement. It has thus become unavailable to the legislator. To him there is, therefore, no instruction in the past. He wants the *statistics of education*, a minute and exact record of the actual condition of our schools, of the teachers and the scholars; of the practical workings of the present system, its success and its failures. This is indispensable to enlightened legislative action.

The committee, however, do not mean to assert that this object has been wholly overlooked by the Legislature of this State. In 1831, incipient measures were taken to obtain such information as would enable the Comptroller to report to the then next session of the General Assembly, the condition of the common schools. To this end the Comptroller was required to furnish the several school society committees with blank forms of returns, specifying the following particular subjects of inquiry; the number and names of the school districts in each society, the length of time a public school is kept in each district, the sex of the teacher, the compensation, the number of scholars, the studies pursued, and the books used; to which was added a call for general information. Of the 209 school societies, into which the State is divided, 136 (about two-thirds) made returns, more or less complete. Many of them embraced only a part of the districts. Items of information called for, were sometimes altogether omitted, in other instances, the facts were imperfectly and indistinctly stated. Hence the information obtained, though important as far as it reached, was not sufficiently complete and exact to render it a safe basis of general conclusions. The resolve of the Legislature imposed no duty upon the districts or teachers, whose co-operation was obviously indispensable to the attainment of the object, and provided no sanction to its implied requirements of the society committees. The measure thus imperfectly devised and executed, has not since been repeated.

The committee are of opinion, that these inquiries ought to be extended and continued; and that provision be made by law for obtaining full and correct answers thereto, not only from every school society, but from every school district. This course is necessary now, as has been suggested, in order to ascertain the nature and extent of existing evils and defects; and it will be necessary hereafter, in order to see how far such evils and defects are remedied and supplied by any measures that may be adopted for that purpose, and to show from time to time, the actual workings of the system. The adjoining States of New York and Massachusetts, have adopted and are pursuing the course here recommended with beneficial results.

Among the defects in our common schools and the regulations regarding them, which the committee, by observation and inquiry, have ascertained, the following are the most prominent:

1. Bad school-houses, deficient as to size, light, and accommodations.
2. Schools too large and multifarious, requiring division by age and attainments, or by sex, or in both these modes.
3. Incompetent teachers, occasioned, 1st. by inadequate compensation; 2nd. by the want of suitable provision for training competent teachers.
4. Bad or imperfect text-books.
5. Discontinuance of school, during a part of the year.
6. Want of a library in each school district, to be kept by the teacher, in the school-house, and to consist of books which may be advantageously consulted by the teacher, and read with interest and profit by the scholars.
7. Want of interest in the parents, and others in the place of parents, resulting in part from existing evils in the system, and, at the same time, enhancing those evils.
8. The want of a general supervisory power, in some individual functionary,

with qualifications adapted to the peculiar duty of improving the system and keeping every part of it in healthy exercise.

9. Were we to mention the munificent fiscal aid flowing from our school fund as one of the obstacles to improvement, it might seem paradoxical. Still it may well be doubted, whether under our present system, the effect of this aid be not to retard improvement. Large and productive as our school fund is, it is insufficient to defray the *whole* expense of the schools. The consequence is, that the income from it is relied upon for the support of the district schools until that income is exhausted; and then the school-houses are closed for the remaining part of the year. By doing more than is necessary to stimulate individual effort, and get not enough to support a good school through the year, little individual effort is made and no good school is sustained. An intelligent writer on this subject in another State, observes: "I do not think that the common schools of Connecticut are as good as the common schools of Massachusetts or New York. And the cause of this inferiority lies in her large school fund. It does too much for the people, unless it does the whole." If there is any truth in these remarks, it is surely wise to modify our system, that the school fund shall not injure the people, by doing too much for them; and this the committee believe is not impracticable. There may be, and probably are, other evils and defects, which have not been brought within the notice of the committee. The proper remedy for some of those which have been specified, is apparent from the *nature* of them. Where the evil is general, and consists merely in the absence of something desirable, and there is but one way of supplying the deficiency, there is no room for doubt or difficulty. But this is not probably the case with most of the evils in question. Their prevalence may be limited; they may exist in different degrees where they prevail, and may not always be distinctly marked in their character. Hence it is necessary to collect all the facts constituting the statistics of schools, and to examine them in detail, and to collate them carefully before the appropriate remedies can be advantageously prescribed.

The committee, therefore, do not deem it expedient at this time, to report a bill for the improvement of common schools, but recommend the adoption of a resolve in the form herewith submitted, providing the means of ascertaining more fully and precisely their actual condition.

The committee have procured and herewith present for the use of the General Assembly, or any committee of that body to whom the subject may be referred:

1. The revised statute of New York, relating to common schools, with the forms and regulations prepared by the Superintendent, and various decisions in cases of appeal.
2. The report of the Superintendent made to the Legislature of that State in 1834.
3. The report of a committee of the Regents of the University of that State, on the education of common school teachers, presented in January, 1835, together with an ordinance of the Regents, &c.
4. An abstract of the school returns of Massachusetts for the year 1834.
5. Cousin's report on the state of public instruction in Prussia, with plans of school-houses, translated by Mrs. Austin.

The report was referred to the standing committee on the School Fund, but no action was taken by the committee, or the Legislature.

In 1836, Gov. Edwards, in his annual message points to one of the principal evils in the condition of the schools.

The situation of our common schools has for some time been the object of complaint. It is thought that our school fund does not furnish the benefits expected from it, and which it ought to furnish. The evil arises from the want of suitable teachers. This want has been experienced in other States as well as our own. Various remedies have been suggested. The education of teachers at the public expense has been proposed. This to some extent would be beneficial, but it is doubtful whether it would remedy the evil entirely. If persons are educated with reference to their being teachers, unless the business of teaching is found to

afford a reasonable compensation, it will soon be abandoned for some other employment.

It is not enough that the teacher should be acquainted with the things to be taught, he must be capable of communicating as well as learning. He ought also to be capable of understanding the character of his pupils, their tempers and dispositions, and discovering the peculiar bent and turn of their minds, and be capable of developing their faculties. To make a good schoolmaster, time and experience are necessary.

At an extra session of the Legislature in December, 1836, the proportion of the surplus revenue belonging to the United States devolving to Connecticut, was deposited with the several towns, and one half of the annual interest of the same was appropriated "to the promotion of education in common schools, in such manner and proportion as each town might direct"—the other half can be in like manner appropriated at the option of the town. Under this act, \$738,661 83 were deposited with the several towns.

In 1837, the school visitors were required to prepare and deliver to the committee of the society, a statement of the condition of each school for the year previous, in the following particulars :

- 1st. The name and number of the district.
- 2d. The number of children which have attended such schools in such year, distinguishing the number of each sex.
- 3d. The average number attending such school.
- 4th. The number of persons in the district, over 16 and under 21, unable to read or write.
- 5th. The length of time the school is kept in winter and in summer.
- 6th. The names of the instructors, of both sexes.
- 7th. The amount of wages exclusive or inclusive of board, as the case may be, paid to each instructor, within the year, both summer and winter.
- 8th. The amount raised in the district for schooling within the year, whether by contribution, subscription, or any other mode.
- 9th. The name and title of each book, and the number of each used in the school within the year, and also whether the book is in general use.
- 10th. By whom the books are selected for the schools.
- 11th. What is taught in the school in summer and what in winter.
- 12th. All other information in relation to the schools, which may be required by the comptroller, as useful to ascertain their condition.

Which original returns shall be by the school society's committee returned to the comptroller on or before the 1st of March next, and before the payment of the March dividend ; together with information in such form as may be prescribed by the comptroller, of the average number of children attending academies and private schools, with the estimated amount paid for tuition—whether there is any local fund in the society for the support of schools—what is its amount—how vested—and what is the amount of the annual income thereof.

Thus, after nearly fifteen years of agitation in the press and in public meetings, and after the attention of the Legislature had been repeatedly called to the subject by successive governors in their annual messages, an efficient step was taken to ascertain the condition of the schools from officers charged by law with their supervision, and the administration of the system. This may be regarded as the commencement of a new era in the legislation of Connecticut, respecting common schools.

Governor Ellsworth introduced the subject of common schools in his message in 1838, in the following language :

It may be important, in the first place, to collect and lay before the public more statistics in relation to this subject ; should this be done, liberal provision ought to be made for the purpose by the State ; it will be seed sown for an ample and generous harvest. I believe it will be found that great improvements are called for in the construction and accommodation of our school-houses, in the qualification of teachers, the modes of instruction, the books used, and the general regulations and superintendence of schools.

We have a public officer whose special duty it is to watch over the pecuniary interests of our common schools, would it not be wise, if the General Assembly should in some suitable way, exercise a like supervision over instruction in those schools, at least so far as it relates to collecting information, and imparting knowledge, while the power of acting in view of these, is left as at present, with the parents and guardians of those who are instructed ? Large sums are annually expended in providing private instruction, which practice has an unhappy effect upon public schools by dividing funds, which, if united, would help to sustain those schools where the children of the poor receive all the instruction they ever obtain.

At this session, information respecting the condition of the common schools was, laid before the Legislature by the Comptroller, in the form of returns from 104 out of 211 school societies in the State. As the particular attention of the General Assembly had been called to this subject by the Governor in his annual message, a select committee on the part of the House and Senate was raised, to whom these and other documents were referred. Among these documents were complete returns respecting every school society and district in one county, and letters from school visitors, teachers, and friends of common schools in 105 towns, embracing nearly all which had made no returns to the Comptroller. In addition to this documentary and written information, one member of the committee* had spent one month in visiting schools, and conferring with teachers and parents in three counties previous to the meeting of the Legislature ; and several gentlemen interested in the improvement of schools presented their views to the committee.

With these sources of information before them, the committee came to the following conclusions as set forth in their report to the Legislature—

That parents exhibit generally little or no interest in common schools by attending examinations, or otherwise ;—

That school visitors and school committees, in some school societies, were not faithful in the discharge of their duties as prescribed by law ;—

That poorly qualified and inefficient teachers were employed in the schools, and that the rate of compensation, viz., \$14 50 for males and \$5 75 for females, per month, exclusive of board, was

* Henry Barnard, member of the House of Representatives from Hartford.

not adequate to their deserts, or equal to the rewards of skill and industry in other fields of labor ;—

That the diversity of school books was an evil of alarming magnitude, there being not unfrequently in the same society 5 different kinds of spelling books, 24 reading books, 9 geographies, 7 histories, 6 grammars, 11 arithmetics, 5 philosophies, 10 miscellaneous books ;—

That school-houses, in respect to location, structure, warming, ventilation, seats and desks, were very much overlooked ;—

That many children of the proper age to receive instruction, did not attend any school ; that this number, in 1837, was not less than 6000 ; that it could no longer be said than a native of Connecticut, of mature age, who could not read or write, was not to be found, for it was ascertained that several of the inmates of the State-prison at Wethersfield, and more who had been discharged from the county jails, on giving their notes for fine and cost of prosecution, were natives of the State, and yet could not sign their name, or read the word of God, or the laws of the State ; and that there was reason to believe that there were more than one thousand persons over 16 and under 21, in 1837, whose education had been thus neglected.

In addition to these alarming facts, it appeared that private or select schools, of the same grade with the district schools, were established in almost every town in the State, and that in these schools less than 10,000 children of the rich and the educated were receiving the advantages of a better instruction, at an expense exceeding all that was appropriated for the other 60,000 or 70,000 children.

With these facts before them, the committee unanimously recommended a bill for a public act “ to provide for the better supervision of common schools,” which was passed into a law by the unanimous vote of the Senate, and with but a single dissenting voice in the House.

An Act to Provide for the better Supervision of Common Schools.

1. *Be it enacted, &c.* That his excellency the governor, the commissioner of the school fund, ex-officio, and eight persons, one from each county in the State, to be appointed annually by the governor, with the advice and consent of the senate, shall constitute, and be denominated the board of commissioners of common schools.

2. The board of commissioners of common schools shall submit to the General Assembly an annual report, containing, together with an account of their own doings ; first, a statement, as far as may be practicable, of the condition of every common school in the State, and of the means of popular education generally ; second, such plans for the improvement and better organization of the common schools, and all such matters relating to popular education, as they may deem ex-

pedient to communicate, and said board may require the school visitors of the several school societies, semi-annually, returns of the condition of each common school within their limits; and they shall prescribe the form of all such returns, and the time when the same shall be completed, and transmit blank copies of the same to the clerk of each school society; and said board may appoint their own secretary, who shall devote his whole time, if required, under the direction of the board, to ascertain the condition, increase the interest, and promote the usefulness of common schools.

3. The school visitors in the several school societies, shall lodge with the clerks of their respective societies, such returns of the condition of each common school within their limits, in such particulars, and at such times as the board of commissioners of common schools may specify and direct, and said visitors shall on or before the first of April in each year, lodge with the clerk of their respective societies, a written report of their own doings, and of the condition of their several schools within their limits, for the preceding season of schooling, with such observations as their experience and reflection may suggest, who shall submit the same to the next meeting of said society, and said visitors may require of the several teachers to keep a register of their schools, in such form as may be prescribed by the board of commissioners aforesaid.

4. The clerks of the several school societies shall transmit to the board of commissioners of common schools, on or before the tenth day of April in each year, such returns as the school visitors may make, in pursuance of the provisions of the preceding section.

5. The school society committee shall not certify to the comptroller of public accounts, that the schools in their respective societies have been kept according to law, unless the provisions of the third and fourth sections of this act have been duly observed.

6. For the compensation of the secretary, provided for in the second section of this Act, the comptroller of public accounts is directed to draw an order on the treasurer for such sum as the board of commissioners of common schools may allow for his services, provided the same does not exceed three dollars per day, and his expenses, while employed in the duties of his office, to be paid out of any moneys not otherwise appropriated.

We can not close this rapid, but faithful sketch of the progress of the schools and school system of Connecticut from 1800 to 1838, with the same gratifying summary of results, which the former period presented. The schools had ceased to command the confidence of many intelligent citizens, and were no longer the main reliance of the whole community for elementary instruction. Private schools, not only for the higher branches of an English education, and for preparation for business, or college, but for the primary studies, were established in every town and society, and liberally supported, not only by the rich and educated, but by many who could only afford to do so, by making large sacrifices of the comforts and almost the necessities of life, rather than starve the intellect and impoverish the hearts of their children. Taxation for school purposes had not only ceased to be the cheerful habit of the people, but was regarded as something foreign and anti-democratic. The supervision of the schools had become in most societies a mere formality—and the whole system seemed struck with paralysis.

IX. KARL CHRISTIAN WILHELM VON TÜRK

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

KARL CHRISTIAN WILHELM VON TÜRK, was born at Meiningen, January 8, 1774. He was the youngest son of Chamber-president and High Marshal von Türk, who was of a noble Courland family, and in the service of the duke of Saxe-Meiningen. At his mother's death, when a boy of six years old, he was transferred to the family of his mother's brother, Grand Huntsman von Bibra, at Hildburghausen, where he was brought up with his cousins under a strict tutor. At seventeen and a quarter years old, without having attended any public school, he entered the University of Jena, where he found in his elder brother Ludwig, who had already been studying there a year and a half, a true friend and a pattern of industry and good conduct; and where he contracted a close friendship with several cotemporaries, amongst whom were T. von Hardenberg, known as a poet under the name of Novalis, and von Bassewitz, afterward Chief President and his own official superior.

After completing his legal studies, in 1793, he offered himself for an office under government in Meiningen, which had been promised him while his father was Chamber-president and his brother a government official, notwithstanding the strictness of the examination. What, however, his knowledge and capacity did not enable him to attain, he secured by means of a very ordinary social talent. During a visit in Hildburghausen, the Prince, then Duke Karl of Mecklenburg, father of Queen Louise of Prussia, found that he was a skillful ombre-player; and he took so strong a liking to him that afterward, upon receiving the principality by the unexpected death of his brother, he determined to fix him within his dominions. Accordingly, in the very next year, 1794, he appointed von Türk chancery auditor, and two years later, chamberlain and chancery councilor. In 1800, his official senior von Kamptz, afterward well known as Prussian minister, was appointed to a public station in Mecklenburg, and von Türk was appointed in his stead to take the oversight of the school system, with his judicial employments. The inquiries which his new place suggested to him drew his attention in such directions that he became gradually estranged from the occupations to which he had been earlier devoted.

In 1804, von Türk took a furlough for six months, visited various

schools, and made the acquaintance especially, of Olivier, Tillich and Pöhlmann, then distinguished teachers of the day. In the same year, he remained during some months, at Pestalozzi's institution at München-Buchsee, and made himself acquainted with his views, and with J. Schmid's system for geometry and mathematics. He published the results of his stay with Pestalozzi, in his "*Letters from München-Buchsee*" (Leipzig, 1808); one of the most practical and useful accounts of Pestalozzi's method.

After his return to Mecklenburg, he could not resist his impulse to become a teacher. He gathered together a troop of boys, instructed them two hours daily and made teachers acquainted with Pestalozzi's method. During his educational journeys he had become acquainted with the prince of Oldenburg, and at the end of 1805, he was appointed to a lucrative office as Justice and Consistory Councilor in Oldenburg, with an annual salary of fourteen hundred thalers, (about \$1050.)

In his new place he experienced the same impulse to exertion as a teacher and educator. Here also he gathered a troop of boys whom he instructed two hours a day; and he received into his house a number of young people, and gave them a complete education. These operations however did not meet the approval of the duke, who intimated a wish that he should devote himself wholly to the duties of his judicial station, and refused his request to be employed wholly in educational matters. This, together with the condition of Oldenburg (then threatened by the French,) which caused him much pecuniary difficulty, decided him to resign his place in Oldenburg and to give himself up entirely to the business of education.

In 1808, with some pupils, sons of a Bremen merchant, he went to Pestalozzi at Yverdun, and for some time instructed in that institution. His work, "Perception by the Senses," (*Die Sinnlichen Wahrnehmungen*.) is a fruit of his labors at that time in Pestalozzi's institution. But the situation of affairs there was unfavorable, and an increasing difference soon grew up between him and Pestalozzi. This decided von Türk to leave him and to establish an educational institution of his own at the castle of Vevay on the lake of Geneva. Here he lived amongst a small circle of children, but happily progressing in knowledge under his love and zeal. The financial results did not, however, answer his expectations, and he finally in 1814 transferred the care of the school to Latour de Peilz, at his castle not far from Vevay. Having offered his services to the Prussian monarchy, he was in 1815 appointed royal and school councilor at Frankfort on the Oder.

The course of instruction which he gave here in September of 1816

upon Pestalozzi's method, to nearly sixty clergymen and teachers, had upon many, who perhaps, then heard of Pestalozzi for the first time, an influence which did not remain fruitless. His efforts to improve the instruction in arithmetic, resulted in his publication of his "*Guide to Instruction in Arithmetic*," which is yet one of the best books of its class. Its fifth edition appeared in 1830. After Natorp's return to his native country in 1817, von Türk was appointed School Councilor in Potsdam, in which station he labored actively for sixteen years, but resigned it in 1833 to devote his whole time and powers to the benevolent institutions which he had founded.

These are (not including the Swimming Institution at Potsdam and the Association for the improvement of silk-raising,) the following :

1. The *Fund for School Teachers' Widows*, a. at Sorau, b. for the district of Frankfort, to which he has devoted the profits of his work on Arithmetic; and c. for the district of Potsdam.

In the district of Frankfort it has since been found better to establish, instead of one widow's society for the whole government, to establish a fund in each synod; an arrangement which has in most cases been entirely successful. In the case of the fund for the district of Potsdam, the plainest conclusions of experience were unfortunately so much overlooked, that after a few years the allowances, which are raised only from taxation, were materially reduced; the consequence of which has lately been many complaints.

2. The *Peace Society of Potsdam*, founded at the Reformation Festival in 1818; a society for the support of talented but poor young men, who are devoted to the arts or sciences. More than a hundred such have been supported by the society. Further information about this society, and its statutes, may be found in Guts-Muth's "New Library of Pedagogy."

3. The *Civil Orphan House*—a twin child, as von Türk calls it, in which about thirty orphan boys are supported. The original fund of this institution was raised from the sale of a collection of paintings belonging to von Türk. It received an express royal sanction in a cabinet order dated 21st February, 1825. Up to 1841, thirty-six young men had received their education in this establishment.

4. The *Fund for the Education and Support of Orphan Girls*; an institution which originated together with the Civil Orphan House, and which is managed in the same way. Up to 1841, twenty orphan girls had been supported by it.

5. The *Orphan House at Klein-Glienicke* near Potsdam, for the orphan children of artizans, elementary teachers and the lower grades of public officers.

It may not be uninteresting to describe the precise circumstances which led to the foundation of the Klein-Glienicke house. Von Türk heard that the Crown Prince was desirous of buying the hunting seat known as Klein-Glienicke, then occupied as a factory, in order to improve it into the counterpart of Prince Carl's adjacent beautiful estate in Glienicke. Von Türk accordingly quietly bought it, and offered it to the Crown Prince at the cost price, but received the answer that he would not be able to make use of the offer. Under these circumstances von Türk applied to his tried friend, Chief President von Bassewitz, and by his mediation gained permission to resign his hasty bargain at a small loss. He, however, made no use of the permission, but told his friend that he would retain the property, and found there another orphan house, to serve as a sort of supplement to the Civil Orphan House, which was intended for the sons of persons of rather higher rank. In fact he laid his plans before some of the higher authorities, but the means which he could show for the establishment of his intended institution were so small that permission was refused him. But promises of support gradually came in, and the heads of several departments, especially Postmaster-general von Nagler and the Ministers of Justice and of Finance declaring in its favor, on account of an arrangement to establish endowed places in it for orphans of their departments, the institution was finally set in operation. The plans for it were remodeled more than once, and more than one reckoning of the funds made; but at last, an association being formed which purchased the real estate from von Türk, and there were thus secured sufficient means to open the establishment for those at least for whom endowed places had been promised. Von Türk never lost his faith in ultimate success, though the funds still remained deficient. It happened that the disposition of some funds from a war-indemnity, not accepted by those entitled to them, were intrusted to the disposal of his chief, von Bassewitz, who, with the consent of the families of these proprietors, appropriated three thousand thalers (about \$2,250,) from this source to the new Orphan House. Thus all difficulties were obviated. The association met, completed the purchase of Klein-Glienicke, leased it to von Türk, who was now able to proceed with the completion of his institution; and had the pleasure of seeing it flourish under his eyes.

In a letter of the present year, (1846,) relating to Klein-Glienicke, von Türk writes, "Here, the favorite idea of my teacher and master, Pestalozzi, is realized; education, combined with agriculture and gardening. My scholars now number about thirty. I have about two hundred Magdeburg *morgen*, (the *morgen* is about five-

thirteenth of an acre,) of tilled land, from sixteen to twenty *morgen* of garden and nurseries, twenty-four *morgen* of meadows, and a dairy which accommodates twenty cows and five horses, besides sufficient room for the silk-making, except that the latter is not comfortably accommodated in winter. I feel great interest in encouraging the establishment of similar institutions. What has been possible for me, without financial resources and in spite of the many prejudices with which I have had to contend, (for example, I have been a government official; and our burghers and laboring classes do not love the government officials; and I have had the little prefix 'von' before my name,) must be possible elsewhere under more favorable circumstances."

6. *Soup Distribution Institution for the Old, Sick, Feeble, and Poor, and Lying-in Women.* By the day-book of the institution, 96,908 portions of soup were distributed in 1845. This was received by six hundred and fifty-one families, including four hundred and forty-one married persons, four hundred and thirty-eight widows and single persons, and thirteen hundred and forty children; in all two thousand two hundred and nineteen persons. The cost of one portion of soup was about 3½ pfennig, (about three-fifths of a cent.)

For some years von Türk had been complaining of the decay of his bodily strength and of his memory, when, in 1845, while he was in Berlin, a dangerous sickness seized him, from which he has never entirely recovered. He died July 31, 1846. His wife, two children and adopted daughter were by his side, and his last hours were peaceful and without pain. His memory will long endure.

On the 25th of the April before his departure from the world in which he had labored so nobly and benevolently, a letter, not without interest in this connection, from which a portion follows. To the request that he would communicate an autobiography for Hergang's Encyclopædia, he replies that he is unable. "My autobiography," he says, "lies ready written in my desk, but I propose to publish it for the benefit of the Teachers' orphans. I have established here an orphan house, especially intended for the orphans of teachers; but their numbers and necessities in the province of Brandenburg, for which the institution is founded, are so great, that I am obliged to refuse many applications; and thus I am contriving the means for assisting a larger number." "The motives which have impelled me to the establishment of the institutions which I have commenced, and the manner and means by which, without means of my own, and without the gift of eloquence, I have been able to accomplish these designs, will be related in my biography, that others, more richly endowed, may learn how to do the like." "I am in my seventy-

third year, on the borders of the grave, in body much broken, but peaceful and happy in mind, and in all my efforts for the improvement and elevation of my fellow-citizens, having enjoyed a success far beyond my hopes." "At Easter I dismissed from the Civil Orphan House, a pupil, son of a country clergyman, who is now studying theology in Berlin. Several of my scholars are already laboring as preachers, judges, physicians, public officials, carpenters, architects, teachers and officers." How happy must we reckon thee, excellent man, who, while still living, hast experienced such intellectual and heartfelt pleasure! Thy works follow thee into eternity; their memory shall even give thee ever increasing pleasure, and many, happy through thy means, shall bring thee thanks.

Noble and venerable as von Türk was, he was yet attacked by the arrows of wicked calumny. On this point we shall only relate the following:

Bishop Eylert relates in his character of Frederic William III., (vol. 2,) that von Türk was suspected by that monarch of being an unprincipled demagogue. Von Türk was living amongst the common people, as his inborn and profound preference made it happiest for him to live, and laboring for their good by his writings and in his official station, according to his irresistible vocation; and some persons had concluded that to be doing this without apparent interested motives, and without remuneration for the necessary sacrifices of labor, means and time, was enough to stamp von Türk a dangerous demagogue. Bishop Eylert, who was a friend of von Türk, undertook to remove this impression from the king's mind. Having argued the case, the king said, "I am glad to have my former opinion corrected, and to be able to entertain a good opinion of one who has certainly been accused to me." At the next festival of the order, von Türk received the red order of nobility; the king immediately interested himself in the Civil Orphan House at Potsdam, and for the institution at Klein-Glienieke, where he endowed additional scholarships, made presents to the orphans, and continued to von Türk, at his resignation of his place as royal and school councilor, in order to devote himself wholly to his institutions, the whole amount of his salary as pension.

X. HERANN KRÜSI.

HERMANN KRÜSI was born March 12th, 1775, at Gais, in the canton of Appenzell. Of his parents he writes in his "Recollections," "they are entitled to the praise of having passed through life in quiet goodness and fear of God, and were careful to give their children a good education." After the good old fashion, they often read in the family Bible, and entered in its blank leaves the birth of each of their children, together with some pious prayer or saying. They also amused themselves, especially on Sundays, by singing from the then popular "Bachofen." Of learning they could of course give their poor children but very little, and what they afterward acquired in school was but little more. His earliest recollections was of a fire which laid the village of Gais in ashes; of which he thus speaks:—

It is natural that the first recollections of the mind should be of uncommon and striking events, such as make a profound impression upon one's whole being, and leave an indelible mark upon the character. This was the case with myself.

On the 7th of September, 1780, a violent south wind blew; bad weather for the weavers, but good for drying turf. "I will go to the turf-ground and turn and dry the turf," said my father; "there is nothing to do in the weaving-room." He took me with him that day for the first time to the turf-pits, which were a good four miles from the village. At half past eleven he heard the sound of a bell. "It can not be striking noon yet," he thought, looking at his work—"Ah God," he cried, "it is the alarm bell;" and we heard the cry of fire! fire! from all sides.

With this fragment, unfortunately, ends the account. The fact of the fire is well known. Notwithstanding his youth, our subject remembered many occurrences of that occasion; especially the next Sunday's service under the open sky. There was very general emotion, which, at the rather remarkable choice of the hymn, "As by the streams of Babylon we sat," &c., broke out into such loud lamentations that the singing could not proceed. These recollections may well have been terrible to the boy, although his father's house was spared by the flames. But a severer stroke came upon him, when his father, in the prime of his manhood, was suddenly snatched away by death from his numerous family. He had always supported his own household, and had taught them according to his ability; and it is difficult to tell what would have become of them, had not Krüsi, then in his fourteenth year, undertaken to perform his father's

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laborious duties of village errand-man and weaver; a service for which the consciousness that he was the trust and stay of an orphaned family gave him strength. Upon his solitary errands to St. Gall, and elsewhere, he used to recite to himself the instruction and counsel which his father had given.

Krüsi might have passed his whole life in his father's monotonous calling, had not a benign Providence given him an indication which had the most important consequences for his entire future. We shall permit Krüsi himself to tell the story, in the words of his own "Recollections," pp. 2-4, which give other and deeper views into his mind at that time:—

At the highest point of the pass, where the road turns away from toward Trogen, my life also took another direction. While earning my living as day laborer and errand-man, I was carrying, one cold day in 1793, to the establishment of Zellweger, with which I afterward came into very different relations, a great bundle of yarn from the mountain. As I stopped to rest, all dripping with sweat, at the very summit, a relative met me, who was then treasurer of the town, one Herr Gruber. After the usual greetings, the following conversation ensued, which I yet remember as the turning point of my life.

Gruber.—"It is warm."

Myself.—"Very warm."

Gruber.—"Now that schoolmaster Hörler is going away from Gais, you have a chance to earn your bread a little more easily. Have you no desire to offer yourself for his place!"

Myself.—"Wishing will not help me much. A schoolmaster must have knowledge; and I have none."

Gruber.—"What a schoolmaster among us needs to know, you at your age can very soon learn."

Myself.—"But how, and where? I see no possibility of it."

Gruber.—"If you wish it, the means will be easily found. Consider the matter and decide upon it."

He left me. I now had abundance of matter for reflection. But no ray of light came into my mind, although the natural sunlight surrounded my body with brightness and warmth. I scarcely felt my load as I proceeded along the ascents and steepes of the road. Whatever has fallen to my lot since that moment, I look upon as the fruit of this conversation.

Since my leaving the day school, where I had learned and practiced only reading, learning by rote, and mechanical copying, and while I was growing up to adult age, I had so far forgotten to write, that I no longer knew how to make all the capital letters; my friend Sonderegger therefore procured me a copy from a teacher in Altstätten, well known as a writing-master. This single copy I wrote over as often as a hundred times, for the sake of improving my handwriting. I had no other special preparation for the profession; but, notwithstanding, I ventured, when the notice was given from the pulpit, to offer myself as a candidate for the place, with but small hopes of obtaining it, but consoling myself with the thought that at least I should come off without shame.

The day of examination came. An elder fellow-candidate was first called before the committee. To read a chapter in the New Testament and to write a few lines, occupied him a full quarter of an hour. My turn now came. The genealogical register, from Adam to Abraham, from the first book of Chronicles, was given me to read. After this, chairman Schläpfer gave me an uncut quill, with the direction to write a few lines. "What shall I write?" I said. "Write the Lord's Prayer, or whatever you like," was the answer. As I had no knowledge of composition or spelling, it may be imagined how my writing looked. However, I was told to retire. After a short consultation, I was, to my wonder and pride, recalled into the room. Here chairman Schläpfer informed me that the whole

committee were of opinion that both candidates knew little; that the other was best in reading, and I in writing.

The other, however, being over forty years old, and I only eighteen, they had come to the conclusion that I should learn what was necessary sooner than he, and as moreover my dwelling-house (the commune had then no school-house of their own) was better adapted for a school-house than his, I should receive the appointment. I was dismissed with friendly advice, and encouraging hopes of increased pay, if my exertions should be satisfactory.

Much attention was excited by the fact that my fellow-candidate, eight days afterward, took a situation as policeman, in which he received three *gulden* a week, while the schoolmaster, who was obliged to furnish his own school-room, had to satisfy himself with two and a half.

Krüsi, becoming schoolmaster at the age of scarcely eighteen, was destined to bear a responsibility almost greater than that which he had so lately laid down. This will easily be understood when it is known that, with his small knowledge of school matters, he had to manage and teach more than one hundred scholars, of various ages and both sexes, in the small school-room. In this situation many would have labored only for their money, as is unfortunately the case at this day even with better instructed teachers; but Krüsi's conduct in this respect may serve as a model. As soon as he had adopted this profession, it was his most earnest effort to live worthily of it, and to fit himself for it in the best possible way; a work in which pastor Schiess, his parish minister, materially assisted him, both with advice and help. Within a few years his school had the reputation of being the best in the canton; and he had the pleasure on Easter Monday of seeing his scholars take the six highest numbers in writing—a study on which the utmost value is placed. Krüsi had been laboring in his vocation now for six years, with zeal and faithfulness, when Providence destined him for another field of labor which he could not have foreseen, and which places the modest man in a situation to exert a wide influence upon the whole school system of our native land. The storm of the French Revolution broke out. In the year 1799, foreign armies swept across the plains of our fatherland, and encountered each other in murderous conflict; even the mountains and high alpine valleys did not escape from the bloody game. Poverty, hunger, and lack of occupation were especially severe in the eastern part of Switzerland; many parents could not maintain their children. Sympathy awoke in the hearts of the nobler men in the less severely pressed portions of the country; and from many sides there flowed in liberal gifts, often accompanied with the offer to receive and bring up needy children. Such an invitation came to pastor Steigmüller from his friend Fischer, in Burgdorf, who was then intrusted with the reorganization of the Swiss schools. The wish was at the same time expressed that he would also send a teacher of

the requisite capacity and character for receiving a training as teacher and educator, and for undertaking the care of the children then in Burgdorf with certain benevolent families. Upon the communication of this invitation to Krüsi, he made no delay; an inner voice urged him not to let pass this opportunity for obtaining a further education. Twenty-six children of both sexes assembled for the expedition. Krüsi, as leader of the troop, was provided with twenty-four thalers for the journey, thirty leagues. Pastor Steinmüller, and bailiff Heim, of the district gave him a testimonial, which we may insert here as a noteworthy trait of the condition of the times:—

FREEDOM! EQUALITY! To all municipal authorities to whom these presents shall come. Citizen schoolmaster Hermann Krüsi is traveling hence from the canton *Säntis* to the canton Bern, with twenty-six poor children, whom he is taking to Burgdorf, where sympathizing benefactors will support and care for them for a time. It is my earnest and hopeful request to all municipalities, and especially to their citizen presidents, that they will kindly afford all needful help to the above named children and to their leader, sent forward by my means as above; that they will, as far as possible, kindly provide for them rest and refreshment at noon, and lodging at night, without pay. For such benevolent assistance, may the Lord bless you.

Thus asks and wishes

Gais, January 20, 1800.

JOH. RUD. STEINMÜLLER, *Pastor*.

I join in the above request to all citizen presidents and citizen members of municipalities of all communes and districts, to which these needy children shall come, on their way hence to Burgdorf; and am fully convinced that all benevolent persons will, without further recommendation, assist the poor caravan to reach its destination as easily and successfully as possible.

The provincial under-bailiff of the circle of Teufen,

SAMUEL HEIM.

Of the journey itself we need only remark briefly that Krüsi, with his troop, was everywhere received in a friendly manner; and in many places they were entertained *gratis*, and even received gifts of money. His "Recollections" give an account of this. It deserves to be mentioned, as remarkable enough to remind us of the widow's cruse of oil, that, at Krüsi's arrival at Burgdorf, he was in possession not only of the twenty-four thalers with which he had set out, but of fifteen *gulden* besides; of which he retained the latter, but sent the former back to the authorities of Gais.

From Fischer, at Burgdorf, Krüsi received a most friendly welcome, and commenced his school. The former, however, soon after died, and Krüsi would have been left quite alone again, had not Providence pointed out to him a new path, by means of the appearance of a man whom he followed with entire confidence.

This was Pestalozzi, whose labors at his estate of Neuhof, and in Stanz, are among the noblest facts of history. It was when already of adult age that Pestalozzi, with warm enthusiasm and profound

love, had conceived the idea of becoming an educator and teacher of the poorer classes, then deeply degraded both in intellect and morals; and giving to education in general a more natural direction. After Fischer's death, he therefore invited Krüsi to form a connection with himself, and with him to conduct the school which he had established in the castle of the place. This school, which Pestalozzi had at first commenced only with little children, was soon changed into an educational institution of a higher grade, which, by means of the entirely new direction of its operations, met with great success. Joy and pride must have filled Pestalozzi's breast, as he soon saw, one after another, young and talented men—Tobler from Wolfhalden, previously a tutor in Basle, Buss from Tübingen, Niederer from Lutzenberg, previously a pastor in Sennwald—full of enthusiasm, leaving each his sphere of labor and resorting to him as trustful disciples to a master who yet could reward them with no earthly treasure except a treasure of rich experience and of deep knowledge of the human heart.

The assemblage of these three Appenzellers will remain remarkable for all time. Each of them developed his own side of the Pestalozzian idea; and they were for a long time the ornament and strength of the institution; and, after subsequent successful labors in independent spheres of occupation, they all died within the same year. Krüsi's letters during this period to his early friend Kern, who is yet alive, and who lived in close personal relations with him for nearly forty years, are also of value to the student of human nature. What he wrote of Tobler, "he possesses my entire respect and love, for I recognize in him uncommon talent as a teacher, and goodness of heart," proved entirely true. Tobler had with enthusiasm taken up particularly the idea of Pestalozzi's "Lienhard and Gertrude;" that of replacing mothers in the position originally designed for them, of educators and instructors for early childhood. Seldom has any man labored with as benevolent and unostentatious a desire for the good of his fellow-men as he, although he was often rewarded by misunderstanding and ingratitude.

Niederer, also, besides immoveable integrity and warm feelings, possessed a far-seeing keenness of understanding, which had already appeared in his correspondence with Tobler, and which at a later period was displayed in the development of the method with so much power and breadth that even Pestalozzi himself had sometimes to yield to the clearness and thoroughness of his views.

It is astonishing to see with what uniformity these men, assembled from different directions, followed their new path. This was truly a power from on high. What else could have enabled the former

errand-boy and village schoolmaster, Krüsi, to say in his letters to his friend, even before Tobler and Niederer came to Burgdorf,—

"In short, the enterprise advances. The seed of a better education, one more adapted to human nature, is already sown. It will bear fruit which as yet no man, not even its discoverer, the noble Pestalozzi himself, is expecting."

The self-denying spirit and lofty views with which Pestalozzi's assistants at this early period were imbued, is powerfully shown by the fact that Krüsi and Buss, being allowed a salary of about \$125 a year each from the Helvetic government, appropriated the whole to the support of the institution, receiving from it only board and lodging.

We will here introduce Pestalozzi's own account of Krüsi's previous labors. It affords a valuable view of his character and gifts as a teacher, as well as hints of the general methods of teaching in those days, and of the power with which Pestalozzi's ideas, even in their then undigested and obscure condition, seized upon the minds of ignorant but earnest and unprejudiced men :—

Krüsi, the first of the three, whose acquaintance I made, had ~~past~~ his youth in a different kind of employment, whence he had acquired that variety of practical abilities, which, in the lower stations of life, so frequently gives the first impulse to a higher degree of development, and by which men, who have been in this school from their earliest childhood, are enabled to become more generally and extensively useful.

In his twelfth and thirteenth years, his father, who carried on a petty traffic, used to send him, with a small capital, amounting to about six or eight pounds sterling, for the purchase of different kinds of merchandises, to a distance of ten to twelve miles; to this employment he joined the trade of a sort of public messenger, carrying letters and executing various orders for the people of his village. When he grew older, he filled up his leisure days by weaving, or other daily labor. At the age of eighteen, he undertook the office of village schoolmaster at Gais,* his native place, without any kind of preparation. He says himself that he did not know the signs of punctuation, even by name; ulterior knowledge was out of the question, because he never had any other instruction than that of a common village school, which was entirely confined to reading, writing copies, and learning by rote the catechism, &c.; but he was fond of children, and he entertained the hope that, by means of this post, he should be enabled to gain for himself that knowledge and education, the want of which he had felt very oppressively, even in his expeditions as village messenger; for, being commissioned to buy a variety of articles, of artificial preparation, and of strange names which he had never heard in his life before, such as ammoniac, borax, and so on; and being at the same time placed in a responsible situation, in which he had to remember every, even the most trifling order, and to account for every farthing; he could not but be struck with the idea, what an advantage it would be, if every child could, by school instruction, be brought to that degree of ability in reading, writing, ciphering, in all sorts of mental exercises, and in the art of speaking itself, which he felt he ought to be possessed of, even for the discharge of his miserable post as village messenger.

Even so soon as the first week, the number of his scholars exceeded one hundred. But he was by no means competent to the task he had undertaken,

* A village, or, rather, a cluster of hamlets on the highest and most airy part of the canton Appenzel, celebrated as a place of resort for persons of consumptive habits, on account of its excellent milk, of which, however, the patients take only the whey.

for he knew not how to give proper employment to all these children, what to teach them, or by what means to keep them in order. All the notions he had hitherto acquired about keeping school were confined to the "setting" of spelling and reading lessons, to be "got by heart;" to the "saying" of the same lessons by turns, followed by the chastisement of the rod if the task was not properly got. From the experience of his own boyhood, however, he knew likewise that, with this mode of "keeping school," the greater part of the children are idling away most of the school-hours, and by idleness are led to a variety of follies and immoralities; that in this manner the time which is most available for education is allowed to pass by without any benefit to them, and that the few advantages which they may derive from their instruction are not even sufficient to counterbalance the ill effects which must necessarily result from such "school-keeping."

Pastor Schiess, the minister of the place, who was very actively combating the old routine, assisted him in his school, during the first eight weeks. From the very beginning they divided the scholars into three classes. With this division, and the use of some spelling and reading-books on an improved plan, which had recently been introduced in the school, they succeeded in making a number of children spell and read together, and thus keeping them generally occupied to a far greater extent than had been possible before.

The new reading-book, that had been introduced by the minister, contained religious truths in short paragraphs, and in biblical sentences; various facts of physical science, natural history, and geography, were concisely stated, and information was given on interesting points of the political constitution of the country. Krüsi observed his pastor, when he read it with the children, putting some questions at the end of each paragraph, in order to see whether they actually understood what they had read. Krüsi tried to do the same thing, and succeeded in making most of the scholars perfectly familiar with the contents of the reading-book. But this was only because, like good old Huebner,* he adapted his questions to the answers which were to be found, ready made, in the book, and because he neither demanded nor expected any other answer, except literally those which the book had put into the children's mouths, long before any question was devised to elicit them. The true reason of his success was, that there was a complete absence of all mental exercise in this his system of catechisation. It is, however, to be observed, that that mode of instruction which originally was termed catechisation, is, no more than Krüsi's system of questioning, an exercise of the mind; it is a mere analysis of words, relieving the child, as far as words are concerned, from the confusion of a whole sentence, the different parts of which are presented to the mind separately and distinctly; it can, therefore, only have merit when used as a preparatory step to the further exercise of clearing up the ideas represented by those words. This latter exercise, commonly termed Socratic instruction, has only of late been mixed up with the business of catechising, which was originally confined to religious subjects exclusively.

The children thus catechised by Krüsi were held up by the minister as examples to his elder catechumens. Afterward it was required of Krüsi, that he should, after the fashion of those times, combine this narrow analysis of words, called catechising, with the Socratic manner, which takes up the subject in a higher sense. But an uncultivated and superficial mind does not dive into those depths from which Socrates derived spirit and truth; and it was, therefore, quite natural that, in his new system of questioning, Krüsi should not succeed. He had no internal basis for his questions, nor had the children any for their answers. They had no language for things which they knew not, and no books which furnished them with a well-framed answer to every question, whether they understood it or not.

Krüsi, however, had not then that clear insight into the nature of those two methods which might have enabled him to apprehend their difference. He had not yet learned that mere catechising, especially if it runs upon abstract terms, leads to no more than the art of separating words and handling analytical forms; but that, in itself, it is nothing but a parrot-like repetition of sounds without understanding: nor was he aware that Socratic questions are not to be addressed

* "Good old Huebner" is the author of a Scripture history in German, to which are attached sets of "useful questions and answers," such as our readers may find in many a "good new" manual of our "enlightened and improved systems."

to children, such as his pupils at Gais, who were equally destitute of the internal fund, that is, of real knowledge,—and of the external means, that is, of language wherein to convey that knowledge. The failure of his attempt rendered him unjust to himself; he thought the fault lay entirely with himself, imagining that every good schoolmaster must be able, by his questions, to elicit from the children correct and precise answers on all manner of moral and religious subjects.

We have already noticed the circumstances which brought Krüsi to Burgdorf.

The more he labored with Fischer the higher seemed to him the mountain which lay in his way, and the less did he feel in himself of that power which he saw would be necessary to reach its summit. However, during the very first days after his arrival, Krüsi was present at some of the conversations I had with Fischer on the subject of popular education, when I expressed my decided disapprobation of the Socratic manner of our young candidates, adding, that it was not my wish to bring children to a premature judgment, on any subject, but that my endeavor was rather to check their judgment, until the children should have an opportunity of viewing the subject from all sides, and under a variety of circumstances, and until they should be perfectly familiar with the words expressive of its nature and its qualities. Krüsi was struck with these remarks; he felt it was there that his own deficiency lay; he found that he himself stood in need of that same elementary instruction which I designed for my children.

Fischer exerted himself with all his power to introduce Krüsi to different departments of science, that he might be able afterward to teach them. But Krüsi felt every day more that the way of books was not the one for him to make progress in, because on every subject he was destitute of that preliminary knowledge of things and their names, which, to a greater or lesser extent, books presuppose. On the other hand, he witnessed the effect which I produced upon my children, by leading them back to the first elements of human knowledge, and by dwelling on these elements with unwearied patience; and the result of his observation tended to confirm him in the notions he had formed concerning the causes of his own inability. Thus by degrees his whole view of instruction underwent a great change, and he began in his own mind to place it on a different foundation. He now perceived clearly the tendency of my experiments, which was to develop the internal power of the child rather than to produce those results which, nevertheless, were produced as the necessary consequences of my proceedings; and seeing the application of this principle to the development of different faculties by different branches of instruction, he came to the conviction that the effect of my method was to lay in the child a foundation of knowledge and further progress, such as it would be impossible to obtain by any other.

Fischer's death accelerated the union between Pestalozzi and Krüsi, which had been contemplated by the latter almost from the first moment of his acquaintance with his paternal friend. The following account of the view which he took of Pestalozzi's plan, after he had for some time enjoyed the advantage of practical co-operation with him, is, notwithstanding its great deficiencies, an interesting testimony in favor of the experiment, in the course of which these ideas urged themselves upon an evidently unprejudiced mind.

1. A well-arranged nomenclature, indelibly impressed upon the mind, is to serve as a general foundation, on the ground of which both teacher and children may, subsequently, develop clear and distinct ideas on every branch of knowledge, by a gradual but well-secured progress from the first elements.

2. Exercises concerning lines, angles, curves, &c., (such as I began to introduce at that time,) are calculated to give children such a distinctness and precision in the perception of objects, as will enable them to form a clear notion of whatever falls within the sphere of their observation.

3. The mode of beginning arithmetical instruction by means of real objects, or at least strokes and dots, representing the different numbers, gives great precision

and certainty in the elements, and secures the further progress of the child against error and confusion.

4. The sentences, descriptive of the acts of walking, standing, lying, sitting, &c., which I gave the children to learn, led Krüsi to perceive the connection between the beginnings of my instruction and the purpose at which I was aiming, viz., to produce a general clearness in the mind on all subjects. He soon felt, that if children are made to describe in this manner things which are so clear to them that experience can not render them any clearer, they must thereby be checked in the presumption of describing things of which they have no knowledge; and, at the same time, they must acquire the power of describing whatever they do know, to a degree which will enable them to give consistent, definite, concise, and comprehensive descriptions of whatever falls within reach of their observation.

5. A few words which I dropped on one occasion, on the tendency of my method to abate prejudice, struck him very forcibly. Speaking of the manifold exertions, and the tedious arguments, by which prejudices are generally combated, I observed that these means had about as much power to counteract them as the ringing of the bells had to disperse thunder-storms,* but that the only true safeguard against the influences of prejudice was a conviction of the truth, founded upon self-observation. For truth, so acquired, is in its very nature an impediment to the reception of prejudice and error in the mind; so much so, that if men thus taught are made acquainted with the existence of prevailing false notions by the never-ceasing cant of society, there is not in their minds any ground for that ignoble seed to rest on, or to grow up in, and the effect must therefore be very different from what it proves to be in the common-place men of our age, who have both truth and error thrust into their imagination, not by intuition and observation, but by the mere charm of words, as it were by a magic lantern.

When reflecting upon these remarks, he came to the conviction, that the silence with which, in my plan of instruction, errors and prejudice were passed over, was likely to prove more effectual in counteracting them than all the endless verbiage which he had hitherto seen employed for that purpose.

6. In consequence of our gathering plants during the summer, and of the conversations to which this gave rise, he was brought to the conviction that the whole round of knowledge, to the acquisition of which our senses are instrumental, depended on an attentive observation of nature, and on a careful collection and preservation of whatever she presents to our thirst of knowledge.

These were the views on the ground of which he conceived the possibility of establishing such a method of instruction as he felt was most needed; viz., one which would cause all the branches of knowledge to bear upon one another, with such coherence and consistency as would require, on the part of the master, nothing but a knowledge of the mode of applying it, and, with that knowledge, would enable him to obtain, not only for his children but even for himself, all that is considered to be the object of instruction. That is to say, he saw that, with this method, positive learning might be dispensed with, and that nothing was wanted but sound common sense, and practicable ability in teaching, in order not only to lead the minds of children to the acquirement of solid information, but likewise to bring parents and teachers to a satisfactory degree of independence and unfettered mental activity concerning those branches of knowledge, in which they would submit themselves to the course prescribed by the method.

During his six years' experience as village schoolmaster, a considerable number of children, of all ages, had passed through his hands; but with all the pains he took, he had never seen the faculties of the children developed to the degree to which they were carried by my plan; nor had he ever witnessed in them such an extent and solidity of knowledge, precision of thought, and independence of feeling.

He inquired into the causes of the difference between his school and mine.

He found, in the first instance, that, even at the earliest period of instruction, a certain feeling of energy was not so much produced,—for it exists in every mind not enervated by artificial treatment, as an evidence of innate power,—as kept alive in consequence of my beginning at the very easiest task, and exercising

* It is a superstitious practice, kept up to this day in many parts of Switzerland and Germany, to ring the church-bells at the approach of a thunder-storm, under the impression that the sacred toll will effectually remove the danger.

it to a point of practical perfection before I proceeded; which, again, was not done in an incoherent manner, but by a gradual and almost insensible addition to what the child had already acquired.

With this method, he used to say, you need not push on children, you have only to lead them. Formerly, whatever he wanted to teach, he was obliged to introduce by some such phrase as this: "Pray, do think, if you please!" "Can't you remember, now?"

It could not be otherwise. If, for instance, in arithmetic, he asked, "How many times seven are there in sixty-three?" the child had no palpable basis on which to rest his inquiry for the answer, and was, therefore, unable to solve the question, otherwise than by a wearisome process of recollection; but, according to my method, he has nine times seven objects before him, which he has learned to count as nine sevens; the answer to the above question is, therefore, with him, not a matter of memory; for although the question, perhaps, may be put to him for the first time, yet he knew long ago, by intuition and practice, that in sixty-three there are nine sevens; and the same is the case in all the other branches of my method.

To adduce another instance: he had in vain endeavored to accustom his children to write the initials of substantives with capital letters;* the rule by which they were to go was constantly forgotten. Now, on the contrary, the same children, having read through some pages of a vocabulary constructed on my plan, conceived of themselves the idea of continuing that vocabulary out of their own resources, and, by writing long lists of substantives, proved that they had a clear notion of the distinctive character of that sort of words. The remark which Krüsi made, that with this method children do not want to be pushed on, is so correct, that it may be considered as a proof of something imperfect in the mode of instruction, if the child still requires any kind of stimulus to thought; and the method can be considered as perfect only where every exercise proposed to the child is so immediately the result of what he has learned before, that it requires no other exertion on his part than the application of what he already knows.

Krüsi further observed that the detached words and pictures, which I used to lay before the children in teaching them to read, produced upon their minds a very different effect from that of the compound phrases commonly used in schools. He, therefore, now began to examine these phrases themselves somewhat more closely, and he found that it was utterly impossible for children to form any distinct notions of the different words of which they are composed; because they do not consist of simple elements before known to the children, and put together in an obvious connection, but that they are unintelligible combinations of objects mostly or entirely unknown. To employ children's minds in the unraveling of such phrases is contrary to nature; it exceeds their powers, and leads to delusion, inasmuch as it introduces them to trains of ideas which are perfectly foreign to them, as regards not only the nature of the objects to which they refer, but likewise the artificial language in which they are clothed, and of which the children have not even acquired the bare elements. Krüsi saw that I was no advocate for this hodge-podge of pedantry; but that I did with my children as nature does with savages, first bringing an image before their eyes, and then seeking a word to express the perception to which it gives rise. He saw that, from so simple an acquaintance with the object, no conclusions, no inferences followed; that there was no doctrine, no point of opinion inculcated, nothing that would prematurely excite them to decide between truth and error; it was a mere matter of intuition, a real basis for conclusions and inferences to be drawn hereafter; a guide to future discoveries, which, as well as their past experience, they might associate with the substantial knowledge thus acquired.

He entered more and more into the spirit of my method; he perceived that every thing depended on reducing the different branches of knowledge to their very simplest elements, and proceeding from them in an uninterrupted progress, by small and gradual additions. He became every day better fitted to second me in the experiments which I myself made on the ground of the above principles; and, with his assistance, I completed, in a short time, a spelling-book, and a course of arithmetic, upon my own plan.

* In the German language, every substantive, and every word used as a substantive is written at the beginning with a capital letter.

Krüsi himself considered the time he spent in Burgdorf the happiest and most fruitful of all his life. The conviction that they were laboring for a cause which was to exert an influence for good upon thousands of their fellow-men filled all the laborers there with enthusiasm, and made every effort and every new creation a delight which they would not have exchanged for all the treasures of earth.

The important year 1805, in which Napoleon decreed the re-separation of Switzerland, brought the institution at Burgdorf to an end; the castle reverted to the canton and was occupied by the high bailiff Pestalozzi, after contemplating for some time the transfer of his institution to Münchenbuchsee, determined to continue it at Yverdun, on the lake of Neuchâtel. For this purpose he received permission to use the old castle there; and all his teachers joyfully gathered around him again. In Yverdun, the institution acquired a European reputation; from all directions there resorted to it not only pupils, (of whom it contained in its most prosperous condition above two hundred,) but also youths and men of riper age and experience, who sought to become acquainted with the discoveries of Pestalozzi, in order to fit themselves for learning and teaching in the great field of human education. An active and significant life grew up within the walls of the modest little institution, to which there gathered pilgrims both great and small from all parts of Europe. The seed there sown bore fruit a thousand-fold throughout all parts of Germany, and especially in Prussia, where the benevolent king highly valued the efforts and the method of Pestalozzi, and sent several young men of talents to make themselves acquainted with the latter.

Besides this undertaking, whose good influence was intended to reach boys, youths, and men of all classes and of all beliefs, Pestalozzi's scheme contemplated also the extension of the advantages of an improved education to girls, in order that they might be trained in their great vocation as mothers. To this end he connected with his institution, in 1806, a girls' institute, under the management of Krüsi and Hopf, the latter of whom was married. This institution succeeded. Pestalozzi's best teachers helped to instruct in it. Among those who patronized it, Krüsi always remembered with affection a wealthy landowner, (Stamm,) of Schleithelm, who sent to Yverdun not only four daughters, but a niece as a sort of guardian, two nephews, and a young man who he was assisting to train himself for the work of teaching. Truly we might almost say, in the words of Jesus, "I have not found such faith, no, not in Israel!" Of the operations of the institution Krüsi says: "It gives us heartfelt pleasure; but we had not foreseen the continually greater demands to be made upon our

strength and time in order to comply with its requirements. We had, therefore, only the choice remaining to devote ourselves wholly to one institution or the other. Pestalozzi undertook the management of the new institution, with which I remained in friendly communication. The domestic management and moral instruction were all under the charge of several female teachers, until Rosette Kasthofer, afterward Niederer's wife, resolved to make it the object of her life to conduct the institution, in order to the accomplishment of Pestalozzi's views. To this purpose she yet remains true. Although the shortness of my experience will not allow me to claim the ability to educate skillful female teachers and good mothers of families, it will always give me pleasure to remember that the united efforts of my celebrated friend and myself called the institution into life."

Krüsi's wife also received her education in this institution; but after he had resigned the management of it. We, and all who knew him, must agree that the simplicity and goodness of his disposition peculiarly fitted him for teaching girls, although he first undertook it at the age of thirty.

Krüsi's recollections of this period were numerous; but we must confine ourselves to a very few of them. His acquaintance with Katherine Egger, afterward his wife, had already commenced in 1810-12. She subsequently removed to Mühlhausen, to assist her sister in her school there; and we shall derive part of our information from the correspondence between them.

In this correspondence he speaks most frequently of Father Pestalozzi, and of Niederer, who was always intellectually active, but at that time often depressed in spirits. The reverence and love with which all the friends and fellow-laborers there, to the ends of their lives, spoke of Father Pestalozzi, sufficiently refute the incorrect things now frequently heard on this subject.

Thus Krüsi says in one place:—

"Father Pestalozzi is always cheerful, and works with youthful energy. We often wonder at his enthusiasm, which will yield neither to labor nor to age. I seek to avoid unpleasant collisions between dissimilar views; and sincerely desire that my labor may always satisfy him."

And again, about Niederer.

"Niederer is working like a giant. A defence of the institution against wrong impressions and a true exposition of Pestalozzi's designs will soon appear in print. Few men are able to work like him."

Even from these few lines we obtain a deep view of the characters

of these three fellow-workmen. Of Krüsi's own labors in the institution we shall let Pestalozzi himself speak, further on. A letter from Krüsi, January 15th, 1812, on occasion of Pestalozzi's birth-day, gives us a view of the feelings and relations of the pupils toward the father of the institution :

"The day," (writes Krüsi to his betrothed,) "was a glorious one, and rich in seeds and fruits for the growth and strengthening of the soul and the heart. I can give you only points of recollections of it: from these points you may complete the lines and the whole picture from your own fancy." He proceeds to give a circumstantial account of the festivities in the schoolroom of each class. The decorations in those of the third and fourth classes were especially ingenious. In the third were to be seen :

a. A transparency of Neuhof, the village of Birr, and the high land of Brunegg. (It was here that Pestalozzi first attempted to realize his benevolent plans for the education of poor factory children.)

b. Opposite to this Pestalozzi's bust, of wood, crowned with a wreath of laurels and immortals.

c. On each side of this, a transparency with an inscription: on the right, in German, "May God who gave thee to us, bless thy work and us long through thee!" on the left, in French, "Homage to our father! the pure joy of our hearts proclaims our happiness."

The room of the fourth class was arranged to represent a landscape, in which were to be seen :

a. Cultivated land and meadows.

b. A rock.

c. A spring rising at the foot of the rock, and a brook flowing from it and fertilizing the land.

d. Near this a poor dwelling; a hut roofed with straw.

e. Over its door the words, "May his age be peaceful."

f. In another place an altar.

g. Over it the words, in a transparency, "May poverty remember him!"

h. On one side of it, "May we live like him!"

i. Upon it, a poor's-box, with a letter from all the members of the class.

As soon as Father Pestalozzi entered the chamber, a little genius came forward from the hut to meet him, and handed him the poor's-box and the letter. He was so surprised and affected that he could scarcely read it. Its contents were as follows :

"Dear Herr Pestalozzi!

"It is very little, it is true, which we, both the present and former members of the class, save in the course of the year; which amount we now offer you as a feeble testimony of the depth of our love; but we are glad to be able to say that at least it comes from sincere hearts; and shall this please you, our end will have been gained. It may express to you our purpose hereafter doing still more for the poor, and like yourself, of finding our own happiness in that of others. May we use well the time of our stay here, and by our efforts evermore deserve your love. May you be happy among us! Full of gratitude to God, we embrace you affectionately, with the wish that you may live to see us fulfill this promise."

The money given amounted to fifty-two Swiss francs. Besides the displays of the children, the printers had a transparency with the words, "May the press send forth hereafter, no longer your life, but only the ripe and beautiful fruit of that life."

Krüsi also describes some festivities which Pestalozzi arranged for his pupils in order on his part to give them pleasure. From this production it is evident with what love and reverence he was regarded by the members of his household, and how they all endeavored to make his days pass in happiness and comfort.

In 1812 Pestalozzi contracted by carelessness a severe illness,

during which he would have Krüsi almost incessantly with him as a nurse. The latter performed that office with his usual tenderness and self-sacrifice; bearing patiently with his weaknesses, and taking pleasure in every remarkable expression of his friend. Thus he writes from the side of the sick bed to his betrothed:

Our father is remarkable even in his sickness. He is wishing and longing to be well again, and to be able to apply himself to his labors once more with renewed strength; but yet he looks peacefully upon death, close before him. One day while his doctors were consulting about sending to Lausanne for a surgeon, he asked them cheerfully if he must set his house in order. When they were gone, he said to Elizabeth, his faithful housekeeper, (Krüsi's sister-in-law,) that he was willing to die; that the world cost him no regrets. To be able thus to look upon life and the eternity is a beautiful and soul-elevating thing. I am in hopes that God will spare him to us; but I can not tell you how much I am benefitted by seeing his peacefulness under such circumstances.

When the disease began to yield to the efforts of the physicians, Krüsi's joy expressed itself in the following language: "Had the inscrutable providence of God taken him from us, I would not resign for the whole world the recollections of having cared for him and of having been continually near him. He takes every occasion of expressing his pleasure at your return and of blessing our union. May God make you happy with me. You know my faith in the wise saying, 'The father's blessing builds the children's house, &c.' He will build our house for us; not of wood or stone, but even if it be the most lowly hut, a dwelling of peace, love, truth, and pious labor."

Pestalozzi repaid this love with paternal tenderness. With such feelings he addressed to Krüsi's intended the following characteristic words: "Good day, Trineli! as long as things go well let us see each other and enjoy each others' society. When things no longer go well, and you see me no more, then do you and Krüsi continue to do right, and I shall take pleasure in you on the other side of the grave."

Still deeper in feeling are the words which Pestalozzi, in a Christmas address before all the members of the institution, addressed to Krüsi personally.*

To Niederer he says:—

Niederer, thou first of my sons, what shall I say to thee? what shall I wish thee? how shall I thank thee? thou piercest to the depths of truth, and with steady footsteps goest through its labyrinth. The love of high mysteries conducts thee. Courageously, with iron breast, thou throwest down the gauntlet to every one who, wandering in by-paths, strays from the ways of truth, regards appearances only, and would deceive his God. Friend, thou art my support; my house rests upon thy heart; and thine eye beams a light which is its health, though my weakness often fears it. Niederer! preside over my house like a protecting star. May peace dwell in thy soul, and may thine outward body be no impediment to thy spirit. Thus will a greater blessing arise to the help of my weakness from thy mind and thy heart.

Krüsi, be ever stronger in thy goodness. Among lovely children, thyself lovely and childlike, thou dost establish the spirit of the house in its goodness; in the spirit of holy love.

* Tobler had already left Yverdon.

At thy side and within thy loving influence, the child in our house no longer feels that he is without father or mother. Thou decidest the doubt whether a teacher can be in the place of a father and mother. Go and fill thy place still more efficiently and completely.

Krüsi, upon thee also I build great hopes. It is not enough to know the method of human education; the teacher must know the mild and easy steps with which the kind mother leads along that road. That way thou knowest and goest; and thou dost keep the child longer in that loving road of his first instruction than even his mother can. Complete thy knowledge; and tell us the beginnings of childish knowledge, with thine own inimitable union of childlikeness and definiteness. Thou didst bring Niederer hither as thy brother, and livest with him in oneness of mind and soul. May the bond of your old friendship ever knit itself more closely; you are the firstlings of my house; and the only ones that remain of them. I am not always of the same mind with you; but my soul depends upon you. I should no longer know my house, and should fear for its continuance, were your united strength to be removed from it. But you will not leave it, beloved, only remaining firstlings of my house.

We may see from the deep feeling and strong expressions of these words how much Pestalozzi valued Krüsi's quiet and modest labors, and how well Krüsi deserved that value. Scarcely one out of twenty teachers has the ability to enter fully into the nature and needs of children, to bear patiently with their weaknesses, to be pleased with the smallest step of progress, and to become fully accomplished in the profession. Upon the management of such young natures, Krüsi gives his opinion in a letter upon the significance of the smallest opinions. We give an extract from it, as useful and important to all teachers.

It requires much experience to develop the heavenly from the earthly. I can assure you of this, that the world is by no means the comedy that it seems; and what we call indifference is often far more definitely good or bad than men consider. The common appearances of life are only indifferent to us when we do not understand their connections, and set too little value upon their influence over us, for weal or woe. But the purer our soul is, the clearer is our perception of the value or worthlessness of every day and usual affairs; the more do we become able to perceive fine distinctions, and the freer do we become in our own choice and the more independent in our connections.

He whose perceptions of the infinite varieties of plants have not been cultivated sees nothing in the meadow but grass; and a whole mountain will contain for him scarcely a dozen blossoms which attract his attention. How different is the case with him who knows the wonders of their construction. He hears himself addressed from every side; the smallest thing has significance for him; he could employ a thousand eyes instead of his two. In their least parts, even to the very dust that clings to his fingers, he perceives mysteries which lead his mind to the loftiest views, and give his heart the liveliest pleasure. As it is here so it is everywhere. One mother will see only the coarsest physical wants of her child, and hears it only when it begins to cry. Another will penetrate entirely into its inner being; and as she is able to direct this, so she is entirely different in respect to its outward management. Nothing that concerns it is indifferent to her. Every thing is an expression of its being; and thus even the least thing acquires a high significance in her eyes.

The small and loveable children who were so often sent to the Pestalozzian institution—much to its credit—always attached themselves especially to Krüsi. From his views as above given, we may imagine with what wisdom he taught these little ones, and sought to awaken their minds and preserve their innocence. To the same purpose are

the following notices in his diary, which it is true contain no very important facts, but which nevertheless, are the clear marks of a man inspired by the holiness of his calling :

"I often pray at evening when I go to bed, that the dear God will let me find something new in nature," said W. M.—, a boy of ten years old, who had found in one of his walks, a stone which he had not before known. This holy habit, (continues Krüsi,) of referring every thing immediately to the Almighty hand, is a sure sign of a pure soul; every expression of it was therefore of infinite value to me. I thanked God that by means of it I had been able to see further into the heart of this good child.

"It is hard for me to write a letter," said S—, when he was set to write to his parents, and found it difficult. Why? said I; adding, you are now a year older, and ought to be better able to do it. "Yes," said he, "but a year ago I could say every thing I knew; but now I know more than I can say." This answer astonished me. It came from deep within the being of the child. Every child, in his liking and capacity for writing letters, must pass through periods, which it is necessary for his parents or teachers to know, lest without knowing or wishing it, they should do the children some harm.

E—, nine years old, said yesterday, "One who is clever should not be told what 'clever' means. But one who is stupid will not understand it, and he may be told as much as you like."

Th. T—, six years old, sees God everywhere as an omnipresent man before him. God gives the birds their food; God has a thousand hands; God sits upon all the trees and flowers.

J. T—, on the contrary, has an entirely different view of God. To him he is a being far off, but who from afar sees, hears, and controls every thing. Are you also dear to God? I asked him. "I do not know," he answered; "but I know that you are dear to him. All good men are dear to him." I was so astonished to hear the child thus express his views of God, and of myself, and his childlike respect and dependence upon his teacher, that I dared question him no longer, lest I should not treat with sufficient tenderness and wisdom, this spark of the divine.

These extracts will sufficiently show that Krüsi considered the hearts of his pupils as holy things, which it was his business to keep in the right path. He was never ashamed, even in his old age, to learn from children; and the traits and efforts of earliest childhood often afforded him help in the construction of a natural system of instruction.

Every child that I have ever observed, writes Krüsi, in his "Efforts and Experiences," (*Bestrebungen und Erfahrungen*.) during all my life, has passed through certain remarkable questioning periods, which seem to originate from his inner being. After each had passed through the early time of lisping and stammering, into that of speaking, and had come to the questioning period, he repeated at every new phenomenon, the question, "What is that?" If for answer he received a name of the thing, it completely satisfied him; he wished to know no more. After a number of months, a second state made its appearance, in which the child followed its first question with a second: "What is there in it?" After some more months, there came of itself the third question: "Who made it?" and lastly, the fourth, "What do they do with it?" These questions had much interest for me, and I spent much reflection upon them. In the end it became clear to me, that the child had struck out the right method for developing its thinking faculties. In the first question, "What is that?" he was trying to get a consciousness of the thing lying before him. By the second, "What is there in it?" he was trying to perceive and understand its interior, and its general and special marks. The third, "Who made it?" pointed towards the origin and creation of the thing; and the fourth, "What do they do with it?" evidently points at the use, and design of the thing. Thus this series of questions seemed to me

to include in itself the complete system of mental training. That this originated with the child is not only no objection to it, but is strong indication that the laws of thought are within the nature of the child in their simplest and most ennobling form.

That Krüsi was now writing his experiences with a view to others, and was continually occupying his mind with reflections upon all the appearances of nature and of life, the following words show :

Thus I have again gained a whole hour of instruction. I had four divisions in mental arithmetic. Each of them, as soon as it had found the clue, taught itself; all that I had to do was to oversee, and to assist. It is a pleasure to teach in that way, and a sweet consciousness rewards the labor. But still, arithmetic is not the chief subject which occupies my mind. For had I the opportunity, I could do something in the investigation of language. For if matters turn out as I am in hopes they may, I shall give some proof that I have not lived in vain. The study of language leads me on the one hand to nature and on the other to the Bible. To study the phenomena of the former, and to become familiar with the contents of the latter, are the two great objects which now demand from me much time, much industry, and a pure and natural observation of childish character.

The little work alluded to in the above lines, bears the title, "Biblical views upon the works and ways of God." (*Biblische Ansichten über die werke und wege Gottes*;) and in it the exposition of God's operations in nature, stated in Biblical language, was carried through upon a regular plan. Krüsi would perhaps have undertaken the work in a different manner at a later period; but the Bible was always to him a valued volume, in which he studied not only the divine teachings and similitudes of the New Testament, but also the lofty natural descriptions of Moses, Job, David, &c. The charge of deficiency in biblical religious feeling has often been brought against the Pestalozzians. For my part I can testify that even the first of them had studied the Bible through and through, and placed uncommon value upon it. Their child-like faith and love for everything good and true, fitted them especially for doing so; moreover, they were inspired by Pestalozzi's energetic Christianity. The fact that they always endeavored to bring a religious spirit into every study, and especially into that of language, by awakening a love of truth, and an active preparation for every thing good and beautiful, is a clear proof that a high and Christian ideal was always before their eyes.

Krüsi's heart was, so to speak, in love with the beauties of nature all his life. In his seventieth year, every flower, tree, sunrise and sunset, spoke to him as distinctly as the first time he saw them. He perceived in nature that plain impression of the divine energy which is often dim to adult men, and is most plainly seen by children. And he always returned to nature to learn from her. How she awakened his sensibilities will appear from the following extract which he wrote in his diary and afterward sent to his betrothed :

It is Sunday, and a divinely beautiful morning. More than an hour before the rising of the sun, the brightness of the morning light could be seen upon the

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summits of the great Alpine chain, from Mont. Blanc, to the Titlis in Unterwalden. Now the majestic sun himself in heavenly splendor, arises and lights up everything before me. Why does he begin his course so quietly that we must watch like a sparrow hawk, lest he escape our attention and stand there before us unawares? If the roll of the thunder were to accompany his rising, how exceedingly seldom would the dwellers in cities and villages keep themselves away from this divine spectacle, which no other earthly show even approaches? And yet none will be away when the roll of the drum announces the coming of an earthly prince. So I thought for a moment; but soon saw the silliness of my meditations. It is the very nature of light to distribute its blessings in silence. In the moral world it is the same. The nearer one approaches to the fountain of life, the more silent are his endeavors to spread around him light and blessings.

At the breaking of such a day it is as if a world were being created again. Light, air, water, land, plants, beasts, and men, appear to our eyes almost in the same order in which they were created.

How quickly is everything done which our Lord God creates! and how frightfully slow are we in understanding even the smallest of them! And besides all this quickness in creating, and slowness in comprehending, how infinite is the number of things which God places before our eyes! No wonder that our knowledge always remains mere patchwork, and that we have to postpone so many things to the other side of the grave, in the hope that there, free from the bonds of the earthly body, we shall progress with an ever increasing speed from knowledge to knowledge, and shall clearly understand how everything exists, in God, which was dim and perplexed to us here.

A strong and encouraging indication of our own inward worth appears in the expression, "The spirit explaineth all things, even the deep things of God." But it is a trouble to most men, that they cannot approach God by some other means than by the spirit; by their perceptions, or by their knowledge. He only can approach God by the spirit, to whom nature opens her mysteries; to whom her operations and her purposes are known. But how few are there who attain even to an A B C of knowledge of the world, from which, as from a living spring, they may gain a pure and worthy conception of their creator. How often must even he who has made the study of nature the business of his life, whose knowledge surpasses that of millions of his fellow beings, stand still before the most common physical, mental, or moral phenomenon, and exclaim: such mystery is too wonderful for me, and too high; I can not understand it.

Then hail to thee, human heart! Through thy feelings is it, that we can approach more nearly to God than through our intellectual powers.

The fundamental human relation is that of childhood. It is based entirely upon love. Without our own consent we enter into it. And this same condition is again the highest aim which man can propose to himself, as his best preparative for heaven. The mind loses nothing by this preëminence of the heart; on the contrary, it is this very preëminence in the growth of feeling, and in purity, which gives a higher character to the power and exercise of the mind.

The effort of men to know things here, as God knows them, to display the order of the heavens, the powers of the earth, and the relation of the mind, in the light of earthly truth, are a holy trait of humanity; but men in general can not find rest by these efforts. Everything elevating in the idea of the creator and ruler of the world must appear to them under the mild aspect of a father, if it is to be beneficial and elevating to them. Without this appearance, his omnipotence would be fearful to the weak mortal, his presence painful, his wisdom indifferent, and his justice a two edged sword, which hangs continually over his head and threatens to destroy him. Only by childlike faith in the fatherhood of God can our race feel itself cared for, elevated, supported and guided; or cultivate confidence, gratitude, love and hope, without a destructive conflict with opposing feelings.

The reëstablishment of this child-like condition and the revivification of the holiness which proceeds from it, are the things by which Christ has opened a way to God, and become the saviour of the world.

Through him is it that the pure in heart may see God. The simplest man has the powers necessary for this purpose. They are only the powers that the child exerts when he recognizes the love of his parents, in the care which they bestow upon him.

Truly, it is wonderful how both termini of the development of our nature—the being a child, and the becoming a child of God, should be so nearly connected with each other.

A holy confidence in God is shown in the letters in which he speaks of his prospects for a certain support in the future. His betrothed, who like him had been left destitute by the storm of the revolution, had wandered away from Glarus, her native land, with a troop of poor children, and had been received and supported by some respectable and benevolent people in Zürich, had of course no property: and Krüsi's new place with Pestalozzi, had much more attraction for the friend and follower, than for one prudent in pecuniary matters. Although Krüsi's approaching marriage must have made a certain income more desirable to him, he still felt no solicitude about it, like a true believer in the words of Jesus, "Take ye no thought," &c., but expressed himself as follows:

God will provide. Whoever is conscious of strong love and honest aims in life, should act with freedom, and believe in the prophecy that all things will be for the best. Has not the being who guides all things, thus far watched wonderfully and benevolently over us and our connection? Many are troubled lest they shall not receive what is their own. Is it carelessness in me that I have no such feelings?

I thank God for the powers which he has given you and me for our duties; I feel much more solicitude that we may use these powers worthily of the benevolent God. At every rising of uneasiness I seem to hear God saying to me as Christ did to his disciples on the sea, "Oh ye of little faith!"

Krüsi at last managed to complete the indispensable arrangements for bringing his wife from Mühlhausen; and he was married at Lenzburg, in 1812. His wife entered with confidence upon her new sphere of life, with a man who was not only her lover, but her teacher and her paternal friend. He was not an inexperienced youth, but a man thirty-seven years old, in the prime of his strength, and with a ripeness of experience and thought, seldom found even at his years. His wife too, although considerably younger, had also seen the rougher side of life, and had also felt the inspiring influence of a right method of education.

After his marriage, Krüsi occupied a private house near the castle, where he had charge of the deaf and dumb children of his friend Näf, as long as his connection as teacher with the Pestalozzian institution continued. This now soon came to an end, and under circumstances so unpleasant that we should prefer to be silent upon them, were it not for removing from one of Pestalozzi's oldest teachers the charge of ingratitude, which many well informed readers have believed in consequence of this separation.

There has seldom been a man who has had so many friends and so few enemies, among so great a variety of men, as Krüsi; thanks to his mild and peace loving disposition. It was his principle always

rather to withdraw himself, than to make the evil greater by obstinacy or violence in maintaining his views. This habit stood him in good stead in the quarrel which at this time threatened to destroy Pestalozzi's institution. But how was it possible, it may be asked, that men engaged in such a noble enterprise, could not go on in harmony with each other? It was the work of one man, a graduate of the Pestalozzian institution, endowed with uncommon mathematical talents, who sacrificed the peace of the institution to his unbounded ambition. This man, Schmid by name, had contrived, under the name of a guardian, to gain the entire control of the aged Pestalozzi, and little by little to alienate him from all his old friends. As early as 1808, Krüsi had concluded that he could not with honor remain longer in the institution, and had accordingly written an affecting letter of farewell to Pestalozzi, from which we make the following extracts :

Dear Herr Pestalozzi :

God knows that I have always sought with an honest heart, the accomplishment of your holy plans. Whenever I have thought it necessary to differ from you, it has been without any ulterior views, from love for you and for the good of humanity.

For eight years the undisturbed possession of your paternal love has made me the happiest of men. Your present expressions upon the sequel of this relation, pierce so much the more deeply, the less I feel that they are deserved. (Here follow some reasons for his withdrawal.)

If it shall be permitted to me to live for the darlings of your heart, the poor, and to prepare their children to receive the benefits which your efforts have secured for them, there will again awaken in your soul some faith in my gratitude, my love, and my earnest endeavor not to have lived by your side, in vain.

Still further, dearest Pestalozzi ; if I have been to blame toward you, it was only by error. Forgive the child who with sorrow and grief tears himself away from his father and his friend.

Whether this letter was delivered to Pestalozzi, is not known. Krüsi did not leave at that time, although Tobler did, dissatisfied for various reasons, and sought another field of labor at Basle.

Schmid was at last, in 1810, removed from the institution, and for a few years the old good understanding prevailed there again. But when he returned and took charge of the financial department, (Pestalozzi, who was well known for a bad housekeeper, not being competent for it,) the quarrel came up again, directed this time chiefly against Niederer and his noble wife, but also against all the other faithful laborers in the institution. Thus, by a departure of many of the best teachers, especially the German ones, it lost many of its brightest ornaments ; and in the year 1816, Krüsi also, with a bleeding heart, sent his resignation to Pestalozzi, whom even in his error he loved and respected ; but for whom at that time another person spoke, in terms of the bitterest contempt, and most irritating coldness. There is, however, some trace of the old affection, in Pestalozzi's answer to Krüsi's letter :

With sorrow I see a connection dissolved, which I would willingly have continued unto my death, had it been possible. It was not, however, and I receive your explanation with the affection which I have always felt for you, praying God to better my pecuniary condition, so that I may be enabled before my death to show that I respect the relation in which I have so long stood to you. Greet your wife and embrace your child for me, and believe me ever your true friend.

Yverdon, 17th Feb., 1816.

PESTALOZZI.

In the letter of Krüsi, just quoted, he expresses his earnest wish to labor for the education of the poor. The same is found in the following to his betrothed; "My inmost wish is to be able to labor in some way, according to the idea of our father, for the education of poor children. We both know what poverty is, and how sorely the children of the poor need help, that they may live worthy and satisfactory lives. It is for us to afford this help. I feel it my vocation, and feel that I have the ability, to do for the poor whatever God has rendered me capable of doing. You must help me. Female instinct must join with manly strength for the accomplishment of this object."

The wish thus expressed was never gratified. It was to be Krüsi's chief occupation to instruct the children of parents in good circumstances, until at a later period his situation in a seminary whose pupils were then, and have been since, mostly from the poorer classes, and who thus have influence both upon the poor and the rich, at least permitted it partial gratification.

After his separation from Pestalozzi, Krüsi set about the establishment of an institution of his own, which he did in fact afterward open, with very little other help than his confidence in God. He purchased a small house, pleasantly situated on the Orbe, by the assistance of a benevolent friend, who lent him a considerable sum, without security, and had the pleasure of seeing an increasing number of parents send their children to him. It was especially gratifying to his patriotism that his first pupils were from his native place of Gais, where they yet live as respectable citizens. In his institution he proceeded upon the Pestalozzian plans; and the happiness of his labors was only troubled by the knowledge that his paternal friend was continually more closely entangled in the snares of the intriguing Schmid, so that even Niederer was forced to leave the institution in 1817.

Although Krüsi was now happily established as father of a family, his first child was born in 1814, and teacher of a prosperous school, yet another destiny was before him, and as previously, without his own coöperation.

In his own little native territory, the public-spirited Hans Caspar Zellweger and others, had conceived the useful idea of seeing a cantonal school for the higher education of native youth, who were then

able to command no other means of instruction in their own country than the ordinary village school. Herr Zuberbühler was appointed to the charge of the institution. He had been in the troop of poor children who went with Krüsi to Burgdorf; and was peculiarly fitted for his place, by his acquirements and by the mildness of his character. But man proposes and God disposes. Zuberbühler was soon seized by an illness, which brought him to the edge of the grave, and which profoundly impressed him with the idea of his own helplessness and the danger from it to his institution. It being necessary to employ another teacher, he invited Krüsi, who was now well known in that neighborhood since his abode near it, and who had besides during the journey into Appenzell, in 1819, made himself acquainted with various influential men there. Soon after this journey he made another to Karlsruhe, Frankfort, Wiesbaden and Schnepfenthal, near Gotha, where he visited the excellent Gutsmuths, who has done so much for the art of gymnastics. It was in 1822 that the news of Zuberbühler's illness reached him, and of his own invitation to the place of director. The prospect of being useful to his fatherland was irresistible to him; and he was also influenced by the promises of an assured income and of entire freedom in modes of instruction. The reputation of his own institution was already great, as will be understood from Krüsi's own mention of the fact as a rare one, that even while he was at Yverdun, pupils were sent to him from three-quarters of the world; some by French merchants from Alexandria, in Egypt, and one from the capital of Persia, Teheran, 800 leagues distant. This may, however, be in some measure ascribed to the fame of the Pestalozzian institution. A very respectable lady from Memel had besides taken lodgings in Krüsi's house with her two daughters, in order to learn under his guidance how to instruct them; and the same thing happened afterwards with an English family at Gais. Krüsi, however, did not hesitate long, but accepted Zellweger's offer in a respectful letter. He himself went first alone to Trogen, and proceeded to his sick friend, Zuberbühler. He says, "When I entered the room Zuberbühler put his hands before his eyes and burst into tears. It relieved his heart to know that I had come to continue the work which he had so well begun." In fact, he grew better from that very day, and was soon completely well. In his native place of Gais, Krüsi attached himself, especially to his early friend Kern, who had traveled to Yverdun to see him. He also had the great pleasure of finding his old friend, the good-natured Tobler, at the head of an institution in St. Gall; where afterwards he often visited him. Having after a time removed thither his effects and his family, Krüsi

with his two assistants, pastor Bänziger from Wolfhalden, and Egli from Hittnem, commenced operations in his new place, in the cantonal school at Trogen.

Want of space will oblige me to be brief in our account of Krüsi's stay at Trogen and Gais. Most readers are however better acquainted with this part of his life than with the earlier. This earlier period is especially valuable for teachers, as being that of the Pestalozzian discoveries, and of the enthusiasm which attended them. The later period is occupied more particularly with the further development of it. The institution at Trogen soon gained reputation. At first, most of the pupils were from Appenzell; but afterwards quite a number came from the canton and city of Zurich, and a less number from the cantons of Bündten, Thurgau, St. Gall and Basle, and several from Milan. There was an annual exhibition, which was always interesting, both as showing the progress of the pupils, and the spirit of the institution, and from the addresses made by the director, and Herren Kasper Zellweger, and Dean Frei; most of which have also appeared in print. The situation of the institution, in a somewhat retired place, had the advantage of withdrawing the pupils from material pleasures and the attractions of the world; in the stead of which were offered many enjoyments of a nobler kind in the pleasure of nature, and in the use of an excellent play-ground and garden. Although none of the studies, (which included the ancient and modern languages,) were carried so far as in many institutions of a higher grade, its results were very favorable, from the harmonious labors of the three teachers, and from the efficient character of the method by which Krüsi aimed always at increasing the capabilities of his scholars, and the industry of most of the pupils. There were, it is true, sad exceptions; and if the teachers did not succeed with any such pupils, there were often put under their charge a number of ill-taught or orphan children. Many were by Krüsi's friendly and earnest admonitions, caused to reflect, and brought into the path of virtue, no more to leave it. Krüsi, who always himself took charge of the instruction and management of such pupils, tried mild methods at first, as long as he had any hopes of succeeding with them; at lessons he was cheerful, pursuing every study with love and pleasantly encouraging every smile from his scholars which proceeded from honest animation. He became severe however upon the appearance of any falsehood, rudeness or immorality, and at such times every one feared the wrath of the angry and troubled father.

In 1832, one of the places of assistant teacher became vacant by the death of Herr pastor Bänziger, in whose stead he placed Herr

Siegfried of Zurich, an active and learned man. Meanwhile another change was at hand in Krüsi's lot. His earnest wish to devote himself to the training of teachers was to be gratified; although even in the cantonal school he had done something in this direction.

Since the year 1830 the cause of popular education had been gaining new life in many cantons of Switzerland. Funds were raised in many places for the establishment of new schools which were to be assisted by the State; the position of teacher began to be considered more respectable, and to be better paid; although neither a fair price nor this respect were paid in more than a few places. Clear-minded men however saw that in order to the improvement of popular education, the teacher must first be educated; that for this purpose teachers' seminaries must be established. The question of the choice of a director for the seminary at Zurich, being under consideration, Krüsi was mentioned by various persons, and particularly by the celebrated composer and firm admirer of Pestalozzi, Nägeli. Although this place, as the sequel showed, was not the right one for Krüsi, he still considered it his duty to think over the matter, and to communicate his views upon it, which he did in a letter to his friend Bodmer, at Zurich, from which we extract the following:

The higher education was always the field in which I hoped to labor, if it were the will of God, and to plant in it some good seed for the common schools of my native land. Thirty years ago, I hoped that I had found such a field, in the Swiss seminary, established in 1802, by the Helvetic government, under Pestalozzi as teacher. The act of mediation broke up the plan by disuniting the cantons, and the schools for the common people with them; but the investigation of the laws of education had always been since that a favorite pursuit with me. During a rich experience at Pestalozzi's side, and during researches up to this time uninterrupted, for the purpose of establishing a system of natural education, it has been my hope to be able to labor efficiently for the school system of my native land. The canton of Zurich is one which rather than any other I would gladly see the first in Switzerland in furthering this most high and noble object. But I ought not to hide from you my fears, whether:

1. I can count upon being able to carry out Pestalozzi's system of elementary education, freely and without hindrance. In that I recognize the only means of awakening the intellectual life of the teacher, or of bringing the same into the school.
2. The strict necessity of coöperating labor would be regarded in the choice of a second teacher. They should each supplement the work of the other; and this can only happen when their efforts are put forth in the same spirit and for the same object.
3. There should be a model school, which I consider an indisputable necessity for the seminary. It is not as a place of probation for new scholars that I desire this, but as affording an example of the correct bodily, material, moral and religious training of the children.
4. Sufficient care should be taken in the selection of a place for the seminary, that the supervision of its morals should be as much facilitated as possible. The pupils of such a seminary are usually of an age most difficult to manage; and their own moral character subsequently has a strong influence upon that of their scholars.

When Krüsi at last entered upon his long desired field of labor, in 1833, being appointed director of the teachers' seminary, erected in

that year, he felt the liveliest pleasure. The object of his life seemed to him now to stand in a clear light before him, and to open to him the prospect that his countrymen would reap the harvest, whose seed he had sown in the spring of youth, and watched over in the summer. Honor to our Grand Council, and to those who were the cause of the resolution, to spread such manifold blessings among our people and blooming youth. Honor to them, that they gave to poor but upright and study-loving youth, the means of training themselves for teachers in their own country, and of learning its necessities, that they might be able to labor for their relief. With gratitude to God, the wise disposer of his fate, Krüsi left the cantonal school, and proceeded to Gais; recalling with emotion the time forty years before, when as an ignorant youth he had there taken up the profession of teaching, himself afterward to become a teacher of teachers.

He considered the years of his labor in Gais, among the happiest of his life. To pass the evening of his days in his native country and his native town, to communicate the accumulated treasures of his teachings and experience to intelligent youth, to labor surrounded by his own family and with their aid, and to benefit so many pupils, all this was the utmost that he had ever dared wish for. This wish was however to be entirely realized. He conducted five courses, attended by sixty-four pupils, and with the assistance of his valued friend, pastor Weishaupt, of his own eldest son, and of Gähler, a graduate of the seminary itself. During the latter course death overtook him.

A boys' school, and a girls' school conducted by his second daughter, soon arose near the seminary, forming a complete whole, over which Krüsi's kind feeling and paternal supervision exercised a beneficial influence. Hardly ever did three institutions proceed in happier unity. Many pleasant reminiscences of this period present themselves; but the space is wanting for them. Krüsi's skill as educator and teacher were the same here as elsewhere. He used the same method, showed the same mild disposition, love of nature and enthusiasm for every thing beautiful and good. He occupied a position even higher in respect of insight and experience, in the completion of his system of education, as adapted to nature; and a more honorable one by reason of his old age and the gray hairs which began to ornament his temples. But despite of his age, whose weaknesses his always vigorous health permitted him to feel but little, he ever preserved the same freshness of spirit. His method of instruction did not grow effete, as is often the case with old teachers. He was always seeking to approach his subject from a new side; and felt the same animation as of old, at finding any new fruits from his method

or his labors. His kind and friendly manners won all his pupils, whether boys and girls, or older youth. Nor is it strange that all the other members of the establishment also looked upon him as a father. An expression of their love and respect appeared on the occasion of his birthday, which they made a day of festival, with a simple ceremonial speeches and songs. Upon such occasions he was wont to recall the time of his abode with Pestalozzi; and his affectionate heart always impelled him to speak in beautifully grateful language of his never-to-be-forgotten father and friend, the originator of his own useful labors, and all his happiness. The crowning event of his happiness was the presentation on his sixty-ninth birthday, in 1843, the fiftieth year of his labors as a teacher, by all the teachers who had been instructed by him, of a beautiful silver pitcher, as an expression of their gratitude. He looked hopefully upon so large a number of his pupils, and gave them his paternal blessing. Two of his birthday addresses have appeared in print.

Until April of that year, Krüsi continued to teach in the seminary and connected schools. After the completion of his fifth course, he had hoped to be able to completely work out his system of instruction, and more fully to write his biography; but this was not to be permitted him. He was able at leisure times to write and publish much matter; the last of these was a collection of his poems. These are valuable, not as artistic productions, but as true pictures of his pure and vivid feeling for every thing good and beautiful. The fact that he wrote many of his songs to the airs of his friend, pastor Weishaupt, shows that he valued high-toned musical instruction. This love of singing remained with him to the end of his life; and his face always grew animated if he saw men, youth and maidens, or young children, enjoying either alone or in pleasant companionship, that elevating pleasure.

At the annual parish festival of 1844, the old man now seventy, was present in Trogen, entering heartily into the exercises of the occasion, and particularly, the powerful choral, "*Alles Leben stromt aus Dir*," which was sung by a thousand men's voices, and an eloquent discourse on common education, by Landarman Nagel. The fatigue, excitement, and exposure to the weather, which was damp and cold, were too much for his strength, and in the evening he was ill, and on the following day he was visited by a paralytic attack, from which he never recovered, but closed his earthly career on the 25th of July, 1844. His funeral was attended by a multitude of mourners from far and near, and his body was borne to its last resting place in the churchyard of Gais, by the pupils of the seminary.

XL THE GENERAL MEANS OF EDUCATION.

WITH AN ACCOUNT OF A NEW INSTITUTION FOR BOYS.

BY HERMANN KRÜSI.

THE following "*Coup d'œil*" of the General Means of Education, with the Plan of the new Institution which Krüsi afterward organized and managed, was published at Yverdun, in 1818, and presents the ideas and methods of Pestalozzi, as held by one of his early assistants and avowed disciples.

The principal means for the education of man are three, viz., 1. Domestic Life. 2. Intellectual Education, or the Culture of the Mind. 3. Religious Training.

I. DOMESTIC LIFE.

The object of domestic life is the preservation of the body and the development of its powers. It may therefore be considered the basis of physical life.

The body is a seed, enveloping the germ of intellectual, moral and religious activity. Domestic life is the fertile soil in which this seed is deposited, and in which this germ is to expand and prosper.

There are three principal relations of domestic life; of parents to children, of children to parents, and of children to each other.

In domestic life, love is the center of all the sentiments and actions. It is manifested in the parents by unremitting care and unbounded self-sacrifice; in the children, in return, by perfect confidence and obedience; and among brothers and sisters, by endeavors to promote each other's happiness. Every event, almost every moment, of domestic life, stimulates the entire being, body, mind and soul, into activity. Beyond the domestic circle, and the further we move from it, the more remarkable does the particular tendency and the isolated action of each faculty become.

A seminary should exemplify domestic life in all its purity. The teachers should regard the pupils as their children; the children should regard the teachers as parents, and each other as brothers and sisters. The purest love should inspire all these relations; and the result should be cares, sacrifices, confidence, obedience, and reciprocal endeavors to aid in attaining the objects desired.

Such a domestic life prepares the child for mental improvement and religious development and habits. Without it, religion will gain no access to the heart, and intellectual cultivation will only be a means for satisfying the selfish demands of the animal nature. But with it, the child is prepared for the successful exercise of the same good qualities and the maintenance of the like relations in a wider sphere as a man, a citizen, and a Christian.

II. INTELLECTUAL EDUCATION.

The aim of this should be, on one hand, to develop the faculties, and on the other to develop executive power. The faculties must all be developed together; an end only to be attained by the exercises of the active and productive faculties. In order to real development, the mind must act of itself; and moreover, the active and productive faculties can not be exercised without at the same time exercising those which are passive and receptive, (namely, those of comprehension and retention,) and preparing them for future service with increased advantage.

That alone can be considered the elementary means of developing the mental

faculties, which is essentially the product of the human mind; which the mind of each individual can, and does in fact, to a certain degree produce, independent of all instruction; that which spontaneously exhibits itself in each department, and is, as it were the germ of attainment in it. These essential productions of the human mind are three; *number, form, and language*.

The ultimate element of number is unity; of form, a line; of language, ideas, which are interior, and sound, which is exterior. Each of these three means may be employed in two different directions; to develop, on one hand, the power of discerning truth, and on the other, that of discerning beauty.

The faculties of the individual can not be developed without his acquiring, at the same time, a certain amount of knowledge, and a certain bodily skill in the execution of what the mind has conceived; and it is an important truth that an enlightened mind will succeed much better than an unenlightened one in the acquirement of knowledge as well as of every kind of executive ability.

Exercises intended to develop the faculties, like those intended to communicate knowledge, should succeed one another in a logical (natural or necessary) order; so that each shall contain the germ of that which is to follow, should lead to it, and prepare for it.

The development of the principal faculties, and the acquirement of a certain amount of information, are necessary to qualify every individual for his duties as a man, a citizen, and a Christian. This degree of development, and this amount of information, constitute the province of *elementary education*, properly so called, which would be the same for all. But beyond these limits, the character and extent of studies should vary, on one hand, according to the indications of nature, which destines individuals by different capacities for different callings; and on the other hand, according to his situation in life.

In the acquisition of knowledge, an elementary path should be followed, introductory and preparatory to a scientific method of study. This is suited to the child, because it leads from a series of particular facts, it leads upward to the discovery of general truths. The scientific method is suitable only to mature and enlarged minds, proceeding from general principles, displaying them in their whole extent, and thus arriving at particular truths.

We shall now point out the proper means of development, and the principal objects to be attained by them; afterward considering the different ages of childhood, and the successive steps in development and order of studies.

*First means of development. Number.**

SECTION 1. Exercises in number, with reference to truth.

A. Mental calculation; to give intuitive knowledge of numbers, and their relations: including

- a. exercises on units.
- b. " simple fractions.
- c. " compound fractions or complex fractions.

In each of these three series there are different degrees, namely,

First, (Preparatory,) Numeration, or learning to count.

Second, Composition of Numbers; e. g., all numbers are composed of units. All even numbers are composed of twos; all triple ones of threes, &c. Also, decomposition of numbers, e. g.; all numbers may be decomposed into units; all even numbers into twos; all triple ones into threes, &c. Also, transformations of numbers. That is, the mode of composing new numbers from the threes, twos or units, coming from the decomposition of an old one.

Third, Determinations of simple relations and proportions.

B. Calculations by symbols. (Figures, letters, &c.) The object of this is to give an intuitive knowledge of rules, under which all operations on numbers may be performed, and also the ability to express numbers and operations by signs. Including,

- a. A knowledge of the decimal numerical system.

* We state the means of development in the following order; *number, form, language*; because the development of number is simplest and has fewest applications, those of *form* are more varied, and *language* includes number, form, and all human knowledge. When we consider the child at different ages, we shall, on the contrary, begin with language, because by that, begins the development of his understanding.

- b.* The four simple rules, addition, subtraction, multiplication and division.
- c.* The rule of three, throughout.
- d.* Evolution and involution.
- e.* Algebra.
- C.* Applications both of mental and written calculation, to the discovery of relations between numbers and the attainment of skill in the common calculations. This application is to four principal objects, viz.,
 - a.* Extent, according to natural and arbitrary measures.
 - b.* Time and duration.
 - c.* Weight.
 - d.* Conventional values.

SEC. 2. Exercises on number, with reference to beauty, viz., Measure in music; the other musical element being sound.

Second means of development. Form.

- SEC. 1. Exercises in form, with reference to truth. (Geometry.)
- A.* Construction of figures from given conditions.
 - a.* With lines determined by points.
 - b.* With planes determined by lines and points.
 - B.* Valuation of lines and surfaces, either by absolute measures, that is, by comparison of dimensions, or by arbitrary standards.
 - a.* The measure of one dimension (length,) represented by a line.
 - b.* The measure of two dimensions (length and breadth,) represented by surface. (Planimetry.)
 - c.* The measure of three dimensions (length, breadth and thickness,) represented by solids. (Stereometry.) The higher development, of the same exercises leads to trigonometry and conic sections.
- Together with the application of these exercises to surveying, drafting, &c.
- SEC. 2. Exercises in form, with reference to beauty. (Drawing.)
- A.* Linear drawing, to form the eye and the hand, and to practice invention, under rules and in forms agreeable to the sight.
 - B.* Perspective.
 - a.* As a result of observation.
 - b.* As the result of geometrical and optical laws.
 - C.* Knowledge and imitation of light and shade.
 - D.* Progressive exercises in drawing from nature.

Third means of development. Language.

- SEC. 1. The interior view of language, i. e., language considered chiefly with reference to the sense of the words. (Exercises to teach children to make observations and to express them with ease and correctness.)
- A.* Maternal and domestic language includes what relates to infancy; what a child can comprehend.
 - a.* Exercises in naming objects. Review whatever the child has learned in actual life, and ascertain if he knows and can name the objects of which he must speak.
 - b.* Exercises on the qualities of objects. A quality is explained to the child, and he is to search for objects possessing it. Both here and in every subsequent exercise, the child must be required to give each example in a complete, correct and strictly true proposition. Each example should contain something of positive interest.
 - c.* Exercises on actions and their relations. An action is explained to the child, and he is to inquire and discover who does it, what is its object; its when, where, wherewith, how, why. In this practice of observing every action with reference to the agent, object, time, place, manner, principles and intention, we not only obtain what this exercise is primarily intended to promote, the development of the faculty of language, and thereby of general intelligence—but also the development in the child of a disposition to explain to himself all he does, and all others do; which is likely to have the happiest effect upon his judgment and conduct.
 - B.* Social language; a development of maternal language.
 - a.* Exercises on families of words. A radical word is chosen, and all its derivatives sought for with the child. He is made to distinguish with care the differ-

ent meanings, proper or figurative, of each derivative, with a reference to the meaning of the radical word. He must give each word, and each meaning of it, in a phrase complying with these conditions, and those above laid down for propositions.

b. Exercises on synonyms.

c. Exercises in definitions.

SEC. 2. The exterior of language; i. e., language with reference to the form of speech.

A. Exterior of language, with reference to truth.

First. Verbal language.

a. Composition of words.

1. With given sounds.

2. With given syllables. A final syllable, or an initial and final syllable, is given the child, and he is to find words formed with them; thus acquiring a knowledge of the roots of words.

3. With simple words. This and the last exercise are preparatory to exercises on the families of words.

b. Composition of phrases.

1. Knowledge of the constituent parts of phrases, (parts of speech.)

2. Inflection of those parts of speech susceptible of it.

3. Construction of phrases with given parts of speech.

c. Composition of periods.

1. Knowledge of the members of a period.

2. Combination of them.

d. Rules for the construction of language.

Second. Written language.

Besides the discourse of the living voice, which is the original and natural mode of representing our ideas, and which discovers them to the ear, there is an artificial method which displays them to the eye by means of signs called *letters*.

The desire of enjoying the ideas of others thus communicated, and of being able, in like manner, to communicate our own, leads to the study of written language, including the following exercises:

a. Combination of the pronunciation of sounds with the knowledge of the signs by which they are indicated to the eye. (Reading.)

b. Tracing these signs. (Writing.)

c. Expression of sounds by them. (Orthography.)

d. Knowledge and use of signs which indicate the relations of the members of the phrase or period composed. (Punctuation.)

B. The exterior of language with reference to beauty. (Modulation, accent, prosody, versification.)

C. Sound, the external element of language, developed in an independent manner with reference to beauty; constituting one of the elements of music.

REMARKS. The study of the construction of a language constitutes grammar; whose laws being correspondent to the laws of thought, grammar leads directly to logic, in which are united the studies of the interior and exterior of language.

By exercises in logic, and in the formation of language, the pupil is prepared to compose on given subjects, and to study the rules of composition, (Rhetoric.)

The same exercises will nourish and develop the talent for poetry or eloquence, where it has been given by nature.

Language, as a production of the human mind, and the expression of physical, intellectual, and moral life, should be universally the same in principle, since human nature is everywhere essentially the same. But as the development of human faculties, the circumstances of life, social and domestic relations, variously differ, this difference must have caused corresponding differences in this production of the mind; that is, different languages. Men associated in a social body have formed for themselves a certain tongue, which has become their national language. In order to intercourse between different nations, they must learn each other's language; hence the study of foreign tongues. This study enables us in a certain sense to hold intellectual and moral intercourse even with nations no longer existing; i. e., by the study of the dead languages.

Those whose mother tongue is derivative, must, in order to understand it perfectly, study the primitive language from which it originated.

SEC. 3. Application of language to the acquirement of knowledge.

Man is the center of all knowledge.

A. Physical man. Knowledge of the body; not anatomical, but of the parts of the animated body.

First degree. Knowledge of the parts of the body.

- a. Names of the parts.
- b. Number of parts of each kind.
- c. Their situation and connection.
- d. Properties of each.
- e. Functions of each.
- f. The proper care of each.

Second degree. Knowledge of the senses.

- a. Distinctions and names of the senses.
- b. Their organs.
- c. Functions of these organs.
- d. Objects of these functions.
- e. Means of the activity of each organ.
- f. Consequences of the action of the senses, sensations, disposition, inclinations.

REMARKS. The child acquainted with the physical man, knows the highest link of external nature; the most perfect of organized beings.

Man belongs to the animal kingdom by his body and by his animal affections. He employs animals for different purposes. The knowledge of physical man conducts therefore to that of the *animal kingdom*.

Plants are also organized beings, but of an inferior organization.

Man obtains from plants the greater part of his food, his clothing and his remedies. They feed the animals he employs. They adorn his abode. Their fate in some respect resembles his, like him they grow, they expand, they produce, decline and die. The knowledge of the physical man conducts therefore to that of the vegetable kingdom.

The mineral kingdom forms the ground of our abode and of that of all organized bodies, and all return to it when they die. It supplies us with salt, many remedies, and the greater part of materials for our habitations. The knowledge of the physical man conducts then to that of the *mineral kingdom*.

Fire, air, water and earth compose all terrestrial bodies, wherefore to the observer, without instruments, they appear as elements. The preservation and the destruction of all bodies depend upon them. The constant property of fire is to consume, of air to volatilize, of water to liquify, of earth to mineralize. It is by their equilibrium that bodies are preserved; so soon as one of the four overpowers the rest, the body subject to its preponderating action must perish. Thus the study of the three kingdoms of nature leads to that of substances commonly called *elements* and this is a preparation and an introduction to the study of *physic* and *chemistry*.

Physical man, animals, minerals, and elements belong to the terrestrial globe, the knowledge of which constitutes *geography*. The study of the earth, regarded as a planet, leads to *astronomy*.

Man as a *physical* being, stands in relation with beings above him, on a level with him and beneath him. Above him are the elements considered at large and the laws of physical nature. On his level are his fellow creatures, and beneath him the individuals of the three kingdoms of nature, and the elements taken in detail.

B. Intellectual man.

a. *Inferior faculties* which animals possess in common with man. Faculties of perception and observation.

b. *Intermediate faculties*. The faculties of comparison, judgment, and inference.

c. *Superior faculties*. The faculty of seeing abstractly, the essence of each object, and the invariable laws of its nature. The faculty of believing divine revelation, which unites the most elevated powers of the soul and heart.

Faculties formed in each of the preceding degrees, are:—

The faculty of devoting the thoughts to one object, excluding every other: (*attention*.)

The faculty of creating any image: (*imagination*.)

The faculty of receiving and preserving every effort of the understanding : (*memory.*)

The faculty of discovering beauty : (*taste.*)

The study of the intellectual faculties leads to the study of intellectual productions.

a. For satisfying intellectual wants, that is to say, the essential means for the expansion of the mind : (*Language, number, form.*) These three productions of the human mind have been already represented as essential means for intellectual cultivation.

b. For satisfying corporal wants or to aid the bodily organs to serve the mind. General knowledge of arts and trades, of the materials they employ, of their mode of action : (*technology.*)

C. Moral man.

The germ of morality is in the sentiments of love, confidence, gratitude. Fruit of these sentiments : (*obedience.*)

Faculties whose action springs from intelligence and sentiment : *will, liberty.* The governing and representative faculty of the will, is with the child the will of his parents ; among men grown, the will of God : (*conscience.*)

Man as a *moral, intellectual and physical* being is in affinity with his superiors, his equals, and his inferiors. Our relation with superior beings commences at our birth : those then above us are our father and mother. Those with whom we begin to be in connection when we enter into civil society are persons in authority. The highest points to which we can ascend in our relation to beings above us is as *children of God*. The fundamental relation of all those with beings on a level with us, is that of brothers and sisters in the interior of our family. These relations exist in full extent, and perfection, when we regard all mankind as brethren, and as forming with us a single family. The fundamental relations of all those with beings beneath us are those of a father and mother toward their children. These relations exist in all their perfection and true dignity when we are the *representatives of the Deity*, with those committed to our care. The knowledge of the relationships of which we have just spoken, existing in domestic life, in civil society, and in religion, the same conducts to that of our rights and duties as men, as citizens and as Christians.

By exercising a child in the study of himself and of the men around him, his faculties, the productions of his intellectual activity, the principles and the consequences of his actions, his relative situation to all beyond himself, the rights and duties resulting from this situation, he is prepared to study the same objects in a wider sphere, namely, in the human race, where appears in full, all that the individual offers in miniature ; and this study is the main object of history. The study of history includes three successive degrees.

1st DEGREE. From the time a child begins to study human nature and as a confirmation of the truths this study will discover to him, he will be shown particular and well chosen facts, taken from the history of individuals or nations, facts, the circumstances of which compose a whole, and form in his imagination, as it were, a picture after nature. When the child shall have arrived at a certain degree of development, he will be made to bring home all these isolated events to the men, or to the people, as well as to the time and place, to which they belong. In this degree the study of history serves principally to feed the *imagination*, and the *memory*.

2d DEGREE. When the young man shall be more advanced in the knowledge of human nature, he may ascend to the origin of the actual state of the nations that surround him, beginning with the people of his own country. We may conduct him to the epoch which has been the germ of this actual state, and seek with him the successive degrees by which the nation has progressed, as well as the principles and consequences of each particular event. He will thus learn to know the current order of history, of the principal nations in existence. He will then pass on to the history of those now no more. In this degree, the study of history serves principally as food to the judgment, inasmuch as it connects actions, causes, and their consequences.

3d DEGREE. Only when the young man shall have become more matured, acquired a deep knowledge of human nature, and the consequences of the development of the individual, is it, that he can with advantage collect the particular

facts, and the series of events which he has learned to know, in order to form one entire whole, and to study in man, the consequences of the development of the human species and of each historical personage, which is the essential end of history, and the highest point to which it can lead. In this degree the study of history serves as food to the mind in its most noble state of action.

Auxiliary means for the development of the faculties and the acquisition of knowledge. The study of what men have produced, as true, beautiful and good.

1st. Progressive lessons according to the degree of development the child has attained and the branches of study to which he applies.

2d. Exercises for the memory. To learn by heart beautiful pieces of poetry, eloquence or music.

3d. Exercise of judgment and of taste: an examination of the productions of art, to trace therein the principles of truth and beauty.

4th. Imitation and reproduction: declamation of pieces of eloquence, or of poetry; execution of musical composition; copying drawings and paintings.

General means for rendering the body of man able to serve his soul and to execute its conceptions. (*Gymnastics*.)

In domestic life the child's body is the object of most tender care. As the child expands, he constantly exercises the organs of his senses and of all his members. Care on the part of the parents and exercises on that of the child are the double means of his preservation and his first development. Bodily exercise for a child comes in the form of plays destined to amuse and divert him. At first they vary at almost every instant. Gradually they become more steady, and more serious.

The art of education extends and perfects what life itself begins and prepares. Thus what in its birth was but play and amusement becomes the object of a complete development, of which the very organisation of our body points out the aim, and the laws.

Gymnastics present three different degrees.

a. Children's plays; free exercises produced by unconscious strength and activity, and determined by the impulse of the mind and the accidental circumstances of life.

b. Progressive and regulated exercises of the limbs. *Gymnastics* properly so called.

c. Exercises preparatory to occupations in active life, and to the employment the pupil is to embrace: *Gymnastics of Industry*.

By the gymnastic exercises, directed toward the essential object of developing the physical faculties in harmony with the intellectual and moral, and by care to preserve the strength and purity of the organs, the body may attain its true destination, namely to serve the mind by executing its conceptions.

Different ages of pupils.

These ages are fixed from a general view of children. In different individuals nature accelerates or retards the progress of development, so that some enter earlier, some later into each period. There are also individuals who develop more rapidly in some directions than in others. *We must therefore take care that the backward faculties are not neglected, which would destroy in the individual, the harmony of human nature.*

A. First age: until five years old.

During this first age, the child is exclusively the object of maternal and paternal care. He only receives instruction occasionally; each moment, each circumstance may furnish a means to fix his attention upon the objects which surround him, and to teach him to observe them, to express his observations and to act upon them as far as his age will allow. The development which the child may acquire in this first period is of the greatest future importance. Every teacher will find a wide difference between the child whose parents have trained him with tenderness and judgment and him who has been in the first stage abandoned to himself, or what is worse, ill-directed or ill-associated.

B. Second age: from five to ten years.

It is at this period only that a regular course of instruction should begin. At first this should be but a recapitulation of all the child has learned by the habits of life, with the simple difference that the objects of the exercises should no longer be determined by accident, but fixed in one plan, adapted to the intellectual wants

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of the child. Domestic life thus furnishes, during the first period, the germs which a course of instruction ought to develop, and in a great measure decides its success.

The following exercises properly belong to this age.

1. Maternal and domestic language.
2. Exterior of language: composition of words, reading, writing, spelling.

We must always take care that the knowledge of the interior of language keeps a little before the exterior.

3. Elementary exercises in singing.
4. Mental arithmetic with units.
5. Construction of figures according to given conditions, and linear drawing.
6. Application of language and the acquisition of knowledge; knowledge of the human body.

There are other exercises which may be begun at this period, but which do not properly belong to it; for which reason we put off the mention of them to the following period.

C. Third age; from ten to fifteen.

1. Interior of language: social language.
2. Exterior of language: composition of phrases and of periods, orthography, punctuation.
3. Continuation of singing exercises.
4. Mental arithmetic with simple and with compound fractions.
- Written arithmetic to the rule of three, in its full extent, inclusively.
5. *Geometry* properly so called: relation of forms, as far as, and including *stereometry*.

- Drawing: perspective, shades, drawing from nature.
6. Application of language to the acquisition of knowledge.
 - a. Continuation of the study of the physical man: senses, sensations, inclinations, passions.
 - b. Intellectual man.
 - c. Moral man.
 - d. Knowledge of such natural objects in the three kingdoms as by a complete system of positive features, may serve as a representative of a series of other objects of like character.
 - e. Knowledge of the elements as far as it can be acquired by observation, without the aid of physical and chemical apparatus.
 - f. Geography.
 - g. Technology and notices of the principal inventions.
 - h. History, 1st degree.
7. Application of arithmetic to bulk: to duration, to weight, and to the conventional value of objects.

D. Fourth age; from fifteen to eighteen or twenty.

Language. Continuation of language. Rules for the construction of language. *Logic.*

Compositions on given subjects. *Rhetoric.* Continuation of singing exercises. Arithmetic, mental and written; evolution of powers; extraction of roots. Algebra, geometry, trigonometry and conic sections.

Drawing. Continuation of perspective, shades, and drawing from nature.

Application of language to the acquirement of knowledge.

Continuation of the study of the intellectual and moral man.

Relations of the physical, intellectual and moral man to other beings.

Continuation of the study of the three kingdoms of nature.

Elementary course of physics and chemistry.

Geography, mathematics and history.

History, 2d degree.

Application of arithmetic and geometry united, to agriculture, drafting, etc.

Observations on the study of foreign languages.

In each stage of development it is important that the mother tongue should always keep a little before all foreign languages, that the child should learn nothing in these he does not already know in that, so as to leave no deficiency in the mother tongue. If any study were pursued by the child in a foreign language only, such language would in this department take the lead; the child would find

it difficult to express himself in his own tongue on subjects learned by means of a strange one. On the contrary, the study of all foreign languages should serve to make the mother tongue better known.

In a seminary where different pupils speak different languages, these must go hand in hand, and every branch of instruction must be cultivated in them both.

Hence results this advantage, that the pupil learns by *intuition* the meaning of the words of the language which is foreign to him, that is to say he every instant sees this meaning, and does not learn it solely from translation and memory. This mode of employing two languages singularly facilitates the communication of ideas in them both. It also gives the advantage of comparing them, and thereby teaches their actual relations and difference both as to ground and form. A knowledge of the genius, the peculiarities and the shades of meaning of each are the fruits of this comparison.

Dead languages are more foreign to the mind of a child, and more difficult for him. The study of them should be based upon a sufficient development of the living languages, and above all of the native language; without which they remain dead in the mind, without real fruit. This study should not therefore begin before the third period; and should not occupy all the pupils, but only those destined to walk in the paths of science. Those otherwise to be disposed of, may employ their time and their endeavors to much greater advantage.

III. RELIGION. THE SOUL AND THE FINAL END OF ALL EDUCATION.

Third means for the cultivation of man.

As the body is vivified by the soul, so domestic, social and intellectual life are animated and ennobled by religion. Without it the activity of man in each of these three spheres, has only a terrestrial object and falls short of its true dignity and destiny.

Thus the relations of father and mother are ennobled and sanctified when the father and the mother consider themselves, in respect to their children, as the representatives of God, the common father of all.

The state of the child is ennobled and sanctified, when we not only feel ourselves children of mortal parents, but at the same time children of God, destined to rise to perfection even as our heavenly father is perfect.

The state of brothers and sisters is also ennobled and sanctified when we recognise all mankind as brothers and sisters and members of one same family.

The endeavors we make to develop our intellectual faculties and to gain a knowledge of truth, are sanctified when we acknowledge God as the fountain of all wisdom and the eternal source of all virtue and goodness. All earthly life is sanctified when made a preparation for one heavenly and immortal.

The specific means which education may adopt to promote in the child a religious life are:

1. Pious exercises, the principal of which is prayer.
2. Religious conversations, in which we take advantage of the circumstances and events of life to raise the soul of the child from what is earthly and fugitive, to what is heavenly and everlasting.
3. The study of sacred history and important passages of Holy Writ, chosen with care, according to the degree of development the child may have attained, and which, committed to memory, are germs which religious instruction and the events of life will hereafter develop.
4. Religious instruction properly so called; or the regular explanation of the doctrine of our Saviour. This instruction should only take place in the 4th period of development; and the chief aim of every preceding period should be to prepare for it. It should close the child's career and become his support in the hour of trial, his guide to direct his steps to the highest point of perfection of which his nature is susceptible.

All education should proceed from man and lead to God. Man should endeavor to live in God and for God, and to devote to *HIM* all his terrestrial and intellectual existence. To this, domestic and social life, exterior nature, and all the circumstances through which he passes here below, should conduct him. But it is only through the influence of God, that all these can produce this effect; the sublime truths of the gospel can alone lead us into that way which leads to that heavenly life which is our true destination.

PROSPECTUS OF AN ESTABLISHMENT FOR THE EDUCATION OF BOYS.

From the earliest age at which they can receive regular instruction, to that in which they should enter into a scientific pursuit, a profession, or business.

This establishment was commenced three years ago. While I was yet with Mr. Pestalozzi, working with him in his undertaking and teaching in his institution, two pupils were unexpectedly committed to my particular care and direction. These were shortly followed by a third, their relation. From that time a combination of circumstances independent of my will induced me to leave the institution I had assisted to form and direct during sixteen years. I should above all things have preferred, after this separation, to have labored to form teachers for the people, taking poor children equal to the office. Seeing the accomplishment of this desire beyond my reach, I applied myself to measures more within my ability, and such as appeared appointed by Providence. I extended my sphere of activity, receiving such new pupils as were intrusted to my care unsought by me.

This train of circumstances on the one hand, and on the other my desire to remain attached to Messrs. Niederer and Naef, (during many years my friends and companions in labor,) and with them to devote my life to education, induced me again to choose Yverdon for the place of my intended labor, and for the gradual growth of my rising institution.

Our union enables us to find means and men competent in every respect to insure the prosperity of our three institutions, (that of Mr. Naef for the deaf and dumb, that of Mr. Niederer for youth of either sex, and mine.) Mr. Nabholz, whose sentiments and purposes resemble our own, will enter my institution as assistant. Mr. Steiner, a pupil of Pestalozzi, will teach mathematics, in which his talents and success afford the brightest hopes. Keeping up friendly intercourse with Mr. Brousseau, principal of the College of Yverdon and with other respectable men, I receive from them, in the different branches of instruction, assistance of importance to me, and on the continuance of which I can depend. In my former situation the frequent changes which occurred among my companions in labor often pained me on account of its influence on the success of that undertaking to which I devoted my life.

To avoid a like inconvenience, which must inevitably produce every kind of discord, and expose an institution subject to it, to great dangers, we shall choose our assistants and fellow-laborers with the greatest circumspection.

The views which serve as the foundation of my enterprise are the same with those I have helped to develop under the paternal direction of Pestalozzi. All that I have found in many years' observation, both by my own experience and that with my pupils, to be true and conducive to the entire culture of man, I shall strive by unremitting efforts to develop more and more in myself and to apply in a natural manner for the advantage of my pupils.*

My first object is, to establish in my institution a true domestic life; that all the pupils may be considered as members of one family, and that thus all those sentiments and all those virtues which are necessary to a happy existence, and which render the connections of life pure and sweet, may be developed.

Without this foundation, I believe that the blessing of God is wanting on every means of education whatever.

The extent of knowledge and executive ability which the pupils will acquire is in part the same for all, and in part influenced by individual dispositions and destinations. It is the same for all inasmuch as it embraces the development of the faculties and powers most essential to human nature. Thus far, the method has acquired an inviolable basis, inasmuch as it has established language, number and form, as productions of the human mind and as the universal means by which the mind should be developed.

The acquisition of knowledge and executive skill as a result of this development are secured either by means of exercises in language, number and form, or connect themselves with these in a very simple manner. Thus, with the study of numbers is connected mercantile and scientific calculation. The study of form and size leads to the art of drawing and writing. The exercises in the mother tongue as a means of developing the mind of the child, conduct to the study of foreign languages and to the knowledge of objects, which the tongue serves to seize and to define. Music as a combined production of two elements is allied to language by tone, and to number by measure.

In the circle of human knowledge, man as a compound being is the center of a double world: of an exterior and physical world to which the three kingdoms of nature

* I have endeavored in the Coup d'œil which precedes this announcement, to state the means of education such as I conceive them to be. This exposition will be the model and the basis of my work. It is evident that these views and these means can not all be developed by a single man or a single institution. It is a task in which all the friends of education must coöperate.

belong, and also the earth which contains them and all exterior nature; and of an interior world, intellectual and moral, which, proceeding from the faculties and the powers of our nature, contains all the whole sphere of the connections of man, and of his duties toward himself, toward his fellow creatures, and toward God. The child should be as familiar with this interior world as with the exterior and physical world.

Intellectual cultivation should be accompanied by cultivation of the heart. The physical powers should also be developed, in order that the body may be able to perform what the mind has conceived and the will has resolved. Bodily exercise in this respect possesses an essential and incontestable value. The mind and the heart stand in need of the body in all the actions of life. The operations of the soul are hampered in proportion as the body is neglected, or unequal to execute its orders.

In regard to the admission and residence of pupils in my school, I desire parents who propose to intrust their children to my care, to fully weigh the following considerations.

The two most decisive epochs in education are that of early infancy under the mother's care, and that where the youth enters into manhood. If these two periods are successfully passed, it may be considered that the education has succeeded. If either has been neglected or ill-directed, the man feels it during his whole life. The age of boyhood being the intermediate period between early infancy and youth, is of unmistakable importance, as the development of the first period, and the germ of the third; but in no case does this age influence either decisively, by repairing previous defects or neglects, or by insuring what shall follow. In the first age the child belongs by preference to its mother, to be taken care of by her; in the second age it belongs by preference to its father, to be directed by him. As a young man, a new existence opens to him, he ceases to be the child of his parents; and becomes their friend. The son, at maturity, becomes the tender, intimate and faithful friend of his parents, as he was, in his minority, their amiable, docile, and faithful child.

With regard to exterior life, the child must sooner or later become an orphan, and when this misfortune befalls him in his minority, society provides that a guardian shall supply the place of parents until he comes of age. *For the interior life, no one can supply this place for him.* Nothing but intellectual and moral strength in the child himself, and strengthened by that wisdom and that love which proceed from God, can bring us near to HIM and supply the place of the wisdom and the love of our father and mother. When the young man has attained this point, it is only as a friend that he remains the child of his parents. If he is not brought up in these noble dispositions, an unhappy consequence follows; the bonds of nature are broken on his coming of age, because these bonds were only of force with respect to physical life; and the child, who, in this first friendship—in this friendship whose objects are nearest to him—has not supported the trial of fidelity, will never bear the test for any being upon earth.

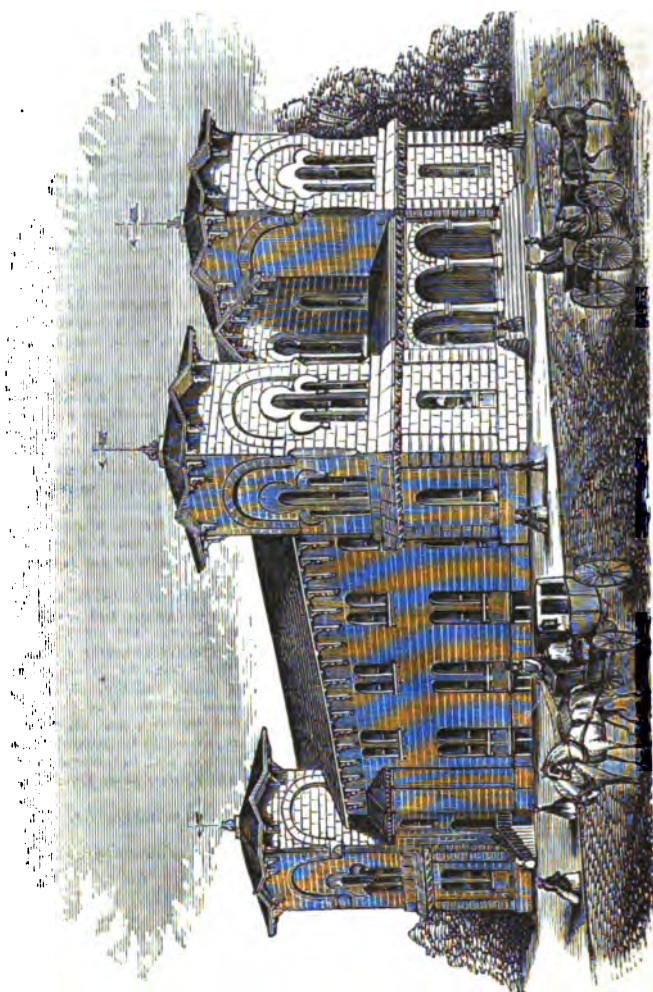
Therefore it is that this period in education is so important, so decisive, and so exacting more than any other. On the one hand it requires the purity and tender affection of domestic life, and on the other side, solid and wholesome food for the mind.

In this exigency a means presents itself which ought to be the keystone in the education of the child, the resting place for the passage from minority to majority, the foundation of a new life; a means raised above every other, namely, *Religion*—the revelation of all that is divine in man manifested by Jesus Christ. The young man, who in body, as a mortal, ceases to be a child, should become a new child in soul, and as an immortal being. After entering this new state, he ought in general to cease to be the pupil of men, to raise himself above their direction, and to become the pupil of himself, that is to say, of that wisdom and that love which comes to us from God and raises us to him.

So long as a man has not attained this point, his education is incomplete. The aim of education is to enable him to reach it.

To strive incessantly toward this object, is the task of the institution here announced.

YVERDON, Pestalozzi's birthday, 1818.



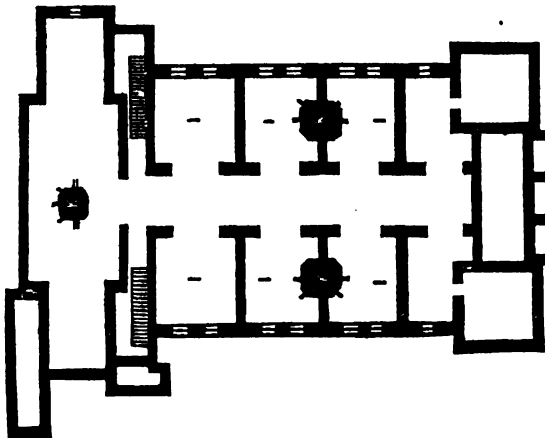
WESTERN PUBLIC HIGH SCHOOL FOR GIRLS, BALTIMORE, MD.

XII. SCHOOL ARCHITECTURE.

PLANS AND DESCRIPTION OF THE WESTERN FEMALE PUBLIC HIGH SCHOOL BUILDING, BALTIMORE, MARYLAND.

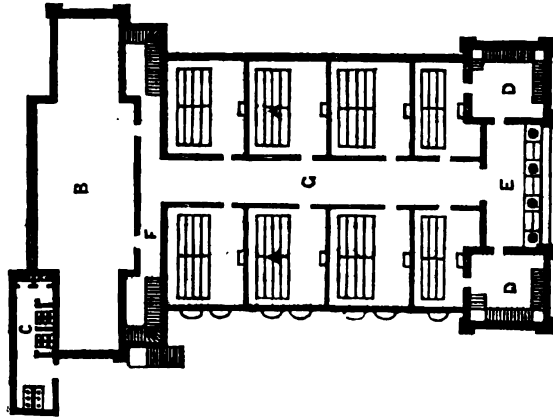
THIS building is located on Fayette street, about thirty feet west of Paca street. It stands on one of the highest eminences in the city of Baltimore, and has a front of seventy-seven feet, including two towers twenty-two feet square, which project four feet, each side of the main building, and a depth of one hundred and thirty-four feet. In the rear the building is eighty-eight feet, including the towers. It is capable of accommodating five to six hundred girls. The style of Architecture is Italian. There is a tower in each corner for stairways. Besides the stairways the towers will contain several rooms. They project fifteen feet from the facade of the main building, and form a Galilee or enclosed porch in front. The doors and windows are round top. Those of the towers are unequal triplets. Those of the flank are formed into couplets. The lower floor is divided into nine recitation rooms, including the chemical hall, which is twenty-four by eighty feet. The other recitation rooms are twenty-two by twenty-eight feet. The study room, which is in the second story, is one hundred and sixteen feet ten inches in length and sixty-five feet wide in the clear. Its altitude is twenty feet. There are two Female High Schools in Baltimore, the Eastern and the Western. They were organised in 1844. They have been found eminently useful in affording to young ladies the opportunity of receiving instruction in the higher branches of education. Cost of lot, \$20,000; of building and furniture, \$30,000.

Fig. 2. BASEMENT AND FOUNDATION.



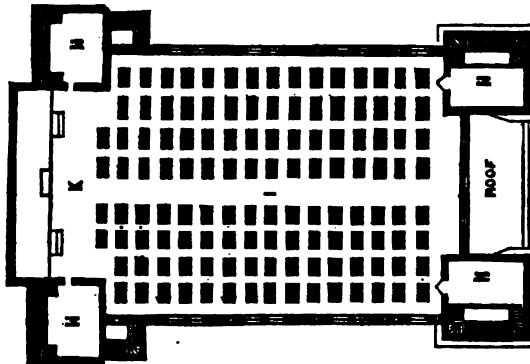
I—
K—Furnaces.

Fig. 3. FIRST FLOOR.



- A—Recitation Rooms.
- B—Chemical Lectures and Apparatus.
- C—Water Closets.
- D—Towers, with Stairways.
- E—Arcaded Portico.
- F—Passage, with Stairway.
- G—Hall.
- The small dots represent flues, for heated air, and for ventilation. Each ventilating flue is eight inches in diameter and terminates in a smoke flue on each side of the building.

Fig. 4. SECOND FLOOR.



- H—Towers.
- I—Saloon and Lecture Room—seat 500 girls.
- K—Rostrum.

DESCRIPTION AND PLANS OF FLOATING PUBLIC SCHOOL IN BALTIMORE.

THE FLOATING PUBLIC SCHOOL OF BALTIMORE, is conducted in a house erected on shipboard, and anchored in the harbor. The design originated with the Board of Trade. Its Committee on Commerce, in the year 1855, in one of its reports, first presented the subject for the consideration of the Board, in view of the then recent shipwrecks and loss of life and property which had shocked the communities of the country, and suggested many ideas of amelioration and reform. The low condition of the sailor, in part disclosed by these events, and the scarcity of good seamen in all our ports, exhibited most clearly the necessity of training up men for that important and responsible calling. A proposition was started that the Board of Trade should unite with the Board of Public Education in the establishment of a school for the regular and thorough training of boys for the sailor's avocation. The plan presented was that of superadding to the ordinary studies of the public schools a certain degree of nautical instruction. This plan was the suggestion of Robert Leslie, Esq., the chairman of the Committee on Commerce of the Board of Trade, a gentleman of enlarged experience in nautical affairs, and who by his devotion to this enterprise, from first to last, is entitled to all the honors of its paternity.

The proposition thus made was received with great favor by the Board of Commissioners of Public Schools, and by their recommendation the plan was matured by a joint committee of both Boards, to include primary, grammar, and even high school studies, as pupils might be prepared to pursue them. These studies, with the necessary teachers, were to be supplied by the Commissioners of Public Schools, while the Board of Trade was to provide the nautical instructor, and the necessary apparatus for that department.

In pursuance of this arrangement, the Board of Trade invoked the aid of merchants and other citizens in the way of subscriptions, taking the lead itself by contributing one thousand dollars, which was followed by all the leading houses engaged in shipping, subscribing two hundred dollars each. To these were added other subscriptions of smaller sums, nearly every one applied to manifesting an approval of, and a readiness to support the measure. Thus about eight thousand dollars was secured, with which the United States sloop of war "Ontario," was purchased and repaired, and fitted up with new masts, spars, sails, and rigging adapted to the uses of the school. This vessel was built in Baltimore, and having been long in the government service, its history and patriotic associations had become a subject of interest to its citizens. This adaptation of the vessel was performed by the Board of Trade, and upon the deck a spacious school house was erected by the School Commissioners, which was replete with all the conveniences of one on shore.

The school was opened on the 14th of September, 1857, with eight pupils. The number has been steadily increasing until the present time, when there are nearly ninety on the roll. Thus far the enterprise has proved eminently successful. A number of boys have already exhibited indubitable evidence of the advantages that have been afforded them, and of the manner in which they have availed themselves of them. Their improvement shows that they have derived great benefit from the instruction, and they give promise of becoming intelligent and useful members of the profession they have chosen. Indeed all who have witnessed the workings of the school, feel assured that it will produce all the results that were anticipated in its establishment; and that it will ultimately elevate

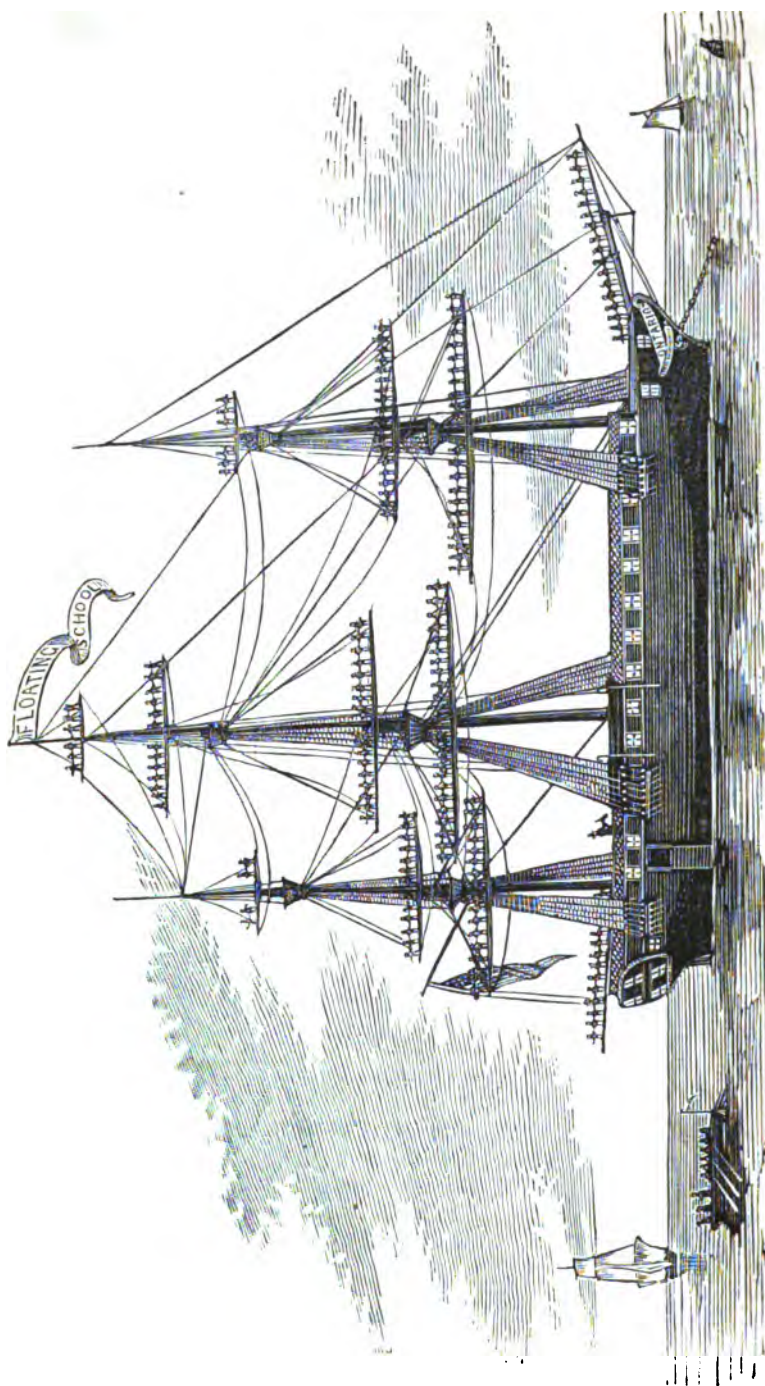
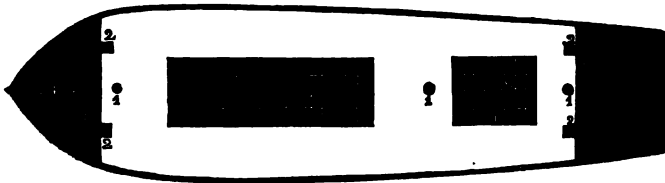


FIG. 1. UPPER OR PRACTICE DECK.

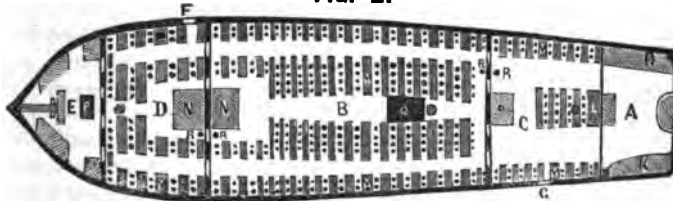
FIG. 1



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|--------------------------|--------------|
| 1—Masts. | 4—Forecastle |
| 2—Fore and Aft Gangways. | 5—Pump. |
| 3—Sky-Lights. | |

FIG. 2. SCHOOL DECK

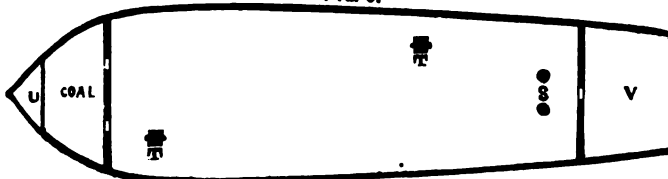
FIG. 2.



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|--------------------------------------|--|
| A—Living Room of Janitor and Family. | H—State Rooms and Water Closet, (Janitor's apartment.) |
| B—Principal School Room—Study Room. | K—Pantry, &c. |
| C—Recitation Room—Mizen Mast. | L—Library. |
| D—Recitation Room—Fore Mast. | M—Pupils' Desks. |
| E—Wash Room and Water Closets. | N—Teachers' Desks. |
| F—Port Entrance. | O—Table, with leaves, used by Nautical Teacher. |
| G—Starboard Entrance. | P and Q—Hatches. |
| | R—Heating Registers. |

FIG. 3. UNDER DECK, FURNACES, FUEL, &c.

FIG. 3.



- | | |
|----------------|--------------|
| S—Water Casks. | V—Lumber. |
| T—Furnaces. | U—Chain Box. |

the character, both at home and abroad, of the seamen that may be shipped in the port of Baltimore.

The accommodations of the school are sufficient for over three hundred boys, and it is confidently expected that as the present pupils advance in their attainments and force of character, they will be qualified for the work of instructing others; and that, by this means, the efficiency of their training will be felt in its operation upon future pupils. The expense of the school, so far as the ordinary instruction is concerned, is the same as of the other grammar schools; and as it takes in only the proper subjects of public education, it involves no extra expense to the city. The additional expense borne by the Board of Trade will not exceed one thousand dollars per annum.

A decided benefit to be secured, in addition to the more direct objects contemplated in the establishment of the school, is, the gathering in of a class of boys who might not otherwise be induced to avail themselves of the opportunities afforded of obtaining their education in the common schools. They embrace with eagerness the privileges offered them in this school, while those of all others are slighted and neglected. Facilities of instruction presented to them in this more congenial form, seems to attract the idle and exposed, whose habits incline them to loiter about the wharves; and the chances are in favor of their being transformed into intelligent, active and useful members of the community. And not only upon these lads, but upon some of those who are more advanced in life, is there the promise of a happy influence through the agency of this school. Applications for admission have been made by seamen already engaged in service; and by some who have been advanced to the position of mates of vessels, the favor has been requested that they may be permitted to attend the school, at such times as they may remain in port. As far as the permission may be allowed, may the influence of the school be extended, in its improvement of the character of seamen.

The school is directed by a joint committee from the Board of Education, and the Board of Trade, composed of E. A. Abbott, Esq., chairman, and Messrs. Plummer, Pitt, Griffin, Knowles, and Eaton, of the School Board, and Messrs. E. S. Courtney, and Lawrence Thorsen, of the Board of Trade. Authority is conferred by the state of Maryland, and city of Baltimore, to give a certificate, or diplomas of proficiency to every deserving pupil who shall graduate in the institution. It is designed that this diploma shall be a recommendation and passport for its possessor, to those to whom he may apply for employment or assistance in the pursuit of the purposes of commerce.

XIII. JOHN GEORGE TOBLER.

JOHN GEORGE TOBLER, an educator of the Pestalozzian school, was born at Trogen, in the canton of Appenzell-Ausser rhoden, in Switzerland, October 17, 1769. He lost his mother in his third year, and his father in his tenth. His education was very inadequate, as was usual in those times. His disposition inclined him to become a preacher. Want of means, however, prevented him until his twenty-third year, when with a very insufficient preparation he entered the University of Basle. With all the other qualifications for becoming a valuable preacher and catechist, his memory for words failed him in respect to the acquisition of foreign languages. This defect decided him entirely to give up entering for the examination as candidate. He was to find a greater sphere of usefulness in another career. He exchanged his theological studies for the practical employment of a tutor and teacher.

In 1799, he placed himself at the head of a school for the female children of emigrants at Basle. An invitation from Pestalozzi brought him to Burgdorf in May, 1800. He there became the friend of Buss and Krüsi, and married, and after a short disagreement with Pestalozzi, labored with him for seven years at Munchen Buchsee and Yverdun. Circumstances brought him to Mühlhausen, where, besides other exertions, he founded his labor-school, which quickly increased so as to contain from four to six hundred scholars, but which came to an end in 1811, in the midst of a prosperous career. Tobler returned to Basle, and set about collecting his pedagogical views and experiences, and preparing for the press a geography upon Pestalozzi's principles.

His pecuniary needs, however, obliging him to seek another situation, he obtained a place as teacher in a private institution in Glarus. On New Year's day of 1817, together with his fellow-teachers, he was dismissed, by reason of the famine. He immediately turned to his profession of tutor, and held a situation for three entire years, in an eminent family of the neighborhood. The children being afterward sent to a newly erected cantonal school, he went to Arbon on the Lake of Constance, with the design of erecting there, instead of a school, a superior orphan-house; but the place was too small. A year afterward he went to St. Gall. Here, the real star of his peda-

gical career shone out upon him. That place deserves gratitude for having afforded him ten years together, of free and unimpeded room for the display of his talents as teacher and educator. One of the noblest fruits of this time, was the education of a son to follow his father's honorable example. In 1831, this son was able to graduate from school, and in 1836, he left St. Gall, and accompanied Niederer to Yverdon, and then to Geneva, at both of which places he was at the head of institutions of his own; and was also of very great service to Niederer's school for girls. At present he fills the place of director of a cantonal school at Trogen.

Tobler passed his latter years at Basle, in part with his second son, the principal of a boys' school at Nyon; where he died in his seventy-fourth year, after a short sickness, Aug. 10, 1843. The last months of his life were rendered happy by an elevated self-consciousness, by the pleasant prospect of ending his days at his native place, as he desired, and by incessant and active occupation in setting in order his writings and his domestic affairs. His inner life was as happy and elevated above earthly things as the evening sun, amidst the eternal blue of heaven.

After this short sketch of Tobler's life, varied and struggling as it was, although not fateful, we may devote a few words to his intellectual peculiarities, his rank as a teacher, and his services to humanity and human culture.

His moral and religious nature was his predominating trait; the key-tone of his mind. His father, who filled the place of both father and mother to his sensitive nature, inspired these sentiments into him while yet a child. The maxim "Seek first the kingdom of God (or what was with him its equivalent, the sphere of attainments according to Christ) and its righteousness, and all other things shall be added unto you," was his rule of life; and in his teaching and his example, afforded him constant assistance in answering such questions as arose during his labors for moral improvement.

As soon as he could write, he commenced the practice of taking down sermons and catechizings; and thus acquired great facility in his German style, and a mastery of analytic methods which afterward stood him in good stead by enabling him to deliver extemporaneous sermons and addresses to children, and to compose excellent sketches of sermons. His popular and instructive style occasioned various congregations, after hearing him, to desire him for a pastor. His morning and evening prayers with pupils and children were exceedingly simple, pathetic, clear, and impressive. In moments of higher excitement, the very spirit of the Apostle John's epistles spoke through

him. His religious instruction and other Sabbath exercises exerted a profound influence upon the neglected children of the manufacturing school at Mülhausen.

While a student at Basle, Tobler exercised a predominating influence over numbers of his fellow students, in inciting them to industry, and inspiring them with the idea of the honorableness of their future calling. He was one of the founders there of a society for intellectual improvement; an enterprise which later events rendered prophetic. A very remarkable difference was to be observed between the after lives of those who were his friends, and others.

While he was teacher and director of the female school at Basle, he followed in general the doctrines of Basedow, Campe, and Salzmann. His method of teaching was substantially that which has since been named the Socratic. By strictly adhering to this method he endeavored to call into life and to develop the minds and hearts of his scholars, not however in the ancient Greek spirit, but in that of Christ; and thus he proceeded until the man appeared upon the stage, who gave an entirely new meaning to the word Education, who completely apprehended the entire subjects of education and instruction, who established them as an independent art and science, and made an epoch in their history. To Pestalozzi Tobler adhered, and was afterward his steady disciple.

Tobler fully comprehended Pestalozzi's idea and method, in their general collective significance for humanity and education. Their individual principle separately was more difficult of comprehension to him. He understood it to be Spontaneous Activity. This, however, he considered only as a *receiving* and *working* faculty, to be developed by perception and drilling (*i. e.* Receptivity and Spontaneity; Nature and Capacity; Faculties;) and in this opinion he was quite correct, as well as in regard to the relation of these faculties to the three subjects of instruction, nature, man, and God. But Pestalozzi had determined a third sub-division of this Spontaneous Activity, before unrecognized, and had distinguished within it the elements pertaining to the intellect and to the feelings, viz., that of the *productive* spontaneous activity of the moral and intellectual powers, (the talents?) In this consists the peculiarity and importance of Pestalozzi's discoveries in method, and of the discoveries and the revolution thus originated. It is by operating according to this distinction that the progress of the development and general training of human nature is assured, and the real intellectual and moral emancipation of the schools substantially established.

During the first period of Pestalozzi's institution, Tobler took part

with all in everything as a beloved teacher and pupil. In a general activity of this kind consisted what might be called Pestalozzi's jubilee. Then, all the teachers were pupils, and all the pupils teachers; so far as they brought forward independent matter of their own, and furnished results of their own inner activity. After a time, however, the necessity of the separation and ordering of different departments of instruction and drilling rendered it necessary for Tobler to select some special department of labor; and he selected the real branches; and among them, that of elementary geography. He established the principles of this study by reference to the actual surface of earth, and to the pupil's own sphere of vision, with a success which entitles him to the name of the father of the new method in geography. Ritter, who knew his labors, and proceeded onward from their termination, passed beyond the sphere of education, by a giant stride forward in his science.

Tobler's personal relations with Pestalozzi were neither fortunate nor enduring. Pestalozzi had not the faculty of determining the proper place for each of his assistants, and of laying out for each of them his appointed work. He was neither an organizer nor administrator; and he regarded Tobler's wishes in this respect as mere assumption and weakness. Tobler could not bring out the real value of his views, without their complete display in actual operation. Whoever could at once put a matter into a distinctly practical form could in Pestalozzi's eyes do everything; and whoever fell at all short of this, nothing. Tobler, therefore, wholly absorbed in the business of elementarizing, did nothing to please or satisfy Pestalozzi. The elementarizing of instruction, and of the so-called "real branches," required too much at once; namely, the investigation and harmonious arrangement of the elements and laws of two spheres, viz., that of children's powers, and that of the proposed subject-matter of them. Pestalozzi required from Tobler, simple, rapid and immediate results from this investigation, even when the indispensable materials for them were wanting. Both Tobler and Pestalozzi, moreover, were in the habit of very plain speaking; and as husband and father, Tobler could not devote his entire life to Pestalozzi.

This false position of Tobler's gradually became that of the teachers and pupils of the institution. And Pestalozzi's disposition and opinions passed more and more under the influence of a single one of the assistant teachers (Schmid.)

At München Buchsee, Tobler was a promoter of the separation between Pestalozzi and von Fellenberg. Coöperation with the latter, was possible only on condition of complete submission to his authority;

a claim which von Fellenberg made on the ground of his social position. But the views of the two men were too radically different; of the world, of men, and of pedagogy. It is true that pedagogically, von Fellenberg proceeded on Pestalozzi's principles; but it was upon those principles as he entertained them when he wrote *Leonard and Gertrude*; when he considered the common school as a valuable instrumentality for the training by society of its needed members; i. e., for education to agriculture, manufacturing, and trades. This view was in harmony with the caste-spirit of society; "The individual was not considered as a moral person, and society subordinated to him as to a superior being, but he was placed quite below it." Pestalozzi had, while at Stanz and Burgdorf, risen very far above this view. He had turned about, let go his consideration of mere purposes, and had laid hold upon the principle of personal exterior independence; not merely as a negative, but as a positive fact. This starting point von Fellenberg did not recognize; and Tobler, therefore, could not agree with him. The true reason why no union between von Fellenberg and Pestalozzi and the Pestalozzians never took place is, therefore, not to be sought amongst any accidental circumstances, but in their radical opposition of views.

In Mülhausen, and afterward in Glarus, Tobler established new schools. His want of adaptedness to the demands of the times upon the teacher and educator here came sharply out. He experienced, by the severe lesson of falling into poverty and want, the truth, that no one, even if possessed of a lofty new truth, strong by nature, and really deserving of confidence and support, can unpunished oppose himself to the tendencies of the age. Every new truth has its martyrs; and a pedagogical truth as well as others.

His real excellence, and his maturest, he showed at St. Gall, while director and center of his school there, as educator and instructor of his pupils, as guide to his assistants, and as unwearied and unsatisfied investigator after new applications of the Pestalozzian method to language, geography and Natural History. He invented a useful alphabetical and reading machine, arranged a simplified mode of map-drawing, and a good though unfinished course of instruction in Natural History. Having continual reference to the common schools, he paid much attention to the subject of obtaining cheap materials for instruction, and took great interest in the training of teachers, for which also he accomplished considerable good.

An idea which never left him after his connection with Pestalozzi, was the training of mothers as teachers; and the establishment of the belief of the destiny and fitness of the female sex for this high

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calling. Even in his latter years he was still enthusiastic upon this subject, and Niederer's female school at Geneva, owes to him much that is valuable.

The following account of Tobler's educational experiments and failures, is given in his own words, in Pestalozzi's "*Eliza and Christopher*."

"After having been, for six years, practically engaged in education, I found the result of my labors by no means answering my expectations. The energy of the children, their internal powers, did not increase according to the measure of my exertions, nor even in proportion to the extent of positive information which they had acquired: nor did the knowledge which I imparted to them appear to me to have a sufficiently strong hold upon their minds, or to be so well connected in its various parts, as I felt it ought to be.

I made use of the best juvenile works that were to be had at that time. But these books contained words, of which the greater part were unintelligible to children, and ideas far beyond the sphere of their own experience; and consequently formed, altogether, so strong a contrast with the mode of thinking, feeling, and speaking, natural to their age, that it took endless time and trouble to explain all that they could not understand. But this process of explaining was in itself a tedious job, and, after all, it did no more toward advancing their true internal development, than is done toward dispelling darkness by introducing a few detached rays of light in a dark room, or in the obscurity of a dense, impenetrable mist. The reason of this was, that these books descended to the profoundest depths of human knowledge, or ascended above the clouds, nay, and to the uppermost heavens of eternal glory, before an opportunity was offered to the children of resting their feet on the solid ground of mother earth; on which, nevertheless, it is absolutely necessary that men should be allowed to stand, if they are to learn walking before flying; and for the latter, moreover, if it is to be flying indeed, their wings must have time to grow.

An obscure foreboding of those truths in my mind, induced me, at an early period, to try to entertain my younger pupils with matters of immediate perception, and to clear up the ideas of the elder ones by Socratic conversations. The result of the former plan was, that the little ones acquired a variety of knowledge not generally to be met with at that age. I endeavored to combine this mode of instruction with the methods I found in the most approved works; but whichever of those books I took in hand, they were all written in such a manner as to presuppose the very thing which the children were in a great measure to acquire by them, viz., the knowledge of language. The consequence was, that my Socratic conversations with the elder pupils led to no better result than all other explanations of words by words, to which no real knowledge corresponds in the children's minds, and of which they have, consequently, no clear notion, as regards either each of them taken separately, or the connection in which they are placed together. This was the case with my pupils, and, therefore, the explanation which they seemed to understand to-day, would a few days after be completely vanished from their minds, in a manner to me incomprehensible; and the more pains I took to make everything plain to them, the less did they evince energy or desire to rescue things from that obscurity and confusion in which they naturally appear.

With such experience daily before me, I felt myself invincibly impeded in my progress to the end which I had proposed to myself. I began to converse on the subject with as many schoolmasters, and others engaged or interested in education, as were accessible to me, in whatever direction: but I found, that although their libraries were well furnished with works on education, of which our age has been so productive, yet they saw themselves placed in the same difficulty with myself, and were no more successful with their pupils than I was with mine. Seeing this, I felt with what an increased weight these difficulties must oppress the masters of public schools, unless, indeed, they were rendered too callous for such a feeling by a professional spirit. I had a strong, but, unfortunately, not a clear impression of the defects of education in all its departments, and I exerted myself to the utmost to find a remedy. I made a determination to collect, partly from my

own experience, and partly from works on the subject, all the means, methods, and contrivances, by which it seemed to me possible that the difficulties under which I labored, might be removed at every stage of instruction. But I soon found that my life would not suffice for that purpose. Meanwhile I had already completed whole volumes of scraps and extracts, when Fischer, in several of his letters, drew my attention to the method of Pestalozzi. I soon began to suspect that he was about to reach the end I was aiming at, without my circuitous means; and that most of my difficulties arose out of the very nature of the plan which I followed, and which was far too scientific and systematic. I then began to see, that in the same manner the artificial methods, invented in our age, were the very sources of all the defects of modern education. On the contrary, I saw Pestalozzi equally free from my peculiar difficulties, and from the general failings, and I accounted for this by the fact, that he rejected all our ingenious contrivances, all our well-framed systems. Some of the means employed by him, that for instance of making children draw on slates, seemed to me so simple, that my only puzzle was, how I could have gone on so long without hitting upon them. I was struck with the idea that all his discoveries, seemed to be of the kind which might be termed "obvious," they were none of them far-fetched. But what most attached me to his method, was his principle of re-educating mothers for that for which they are originally destined by nature, for this principle I had long cherished and kept in view, in the course of my experiments.

I was confirmed in these views by Krüsi, who, at his visit in Basle, gave, in the girls' school, practical specimens of Pestalozzi's mode of teaching spelling, reading, and arithmetic. Pastor Faesch, and Mr. De Brunn, who had in part organized the instruction and management of that institution, according to the loose hints which had as yet reached us on the Pestalozzian method, perceived immediately what a powerful impression was produced upon the children by their spelling and reading together in a stated measure of time. Krüsi had also brought with him some school materials for the instruction in writing and arithmetic, and some leaves of a vocabulary, which Pestalozzi intended to draw up as a first reading-book for children; which enabled us to see the bearing which Pestalozzi's method had upon the development of the different faculties of human nature. All this contributed to mature in me, very rapidly, the determination to join Pestalozzi, according to his wish.

I went to Burgdorf, and the first impression of the experiment, in the state in which it then was, fully answered my expectations. I was astonished to see what a striking degree of energy the children generally evinced, and how simple, and yet manifold, were the means of development by which that energy was elicited. Pestalozzi took no notice whatever of all the existing systems and methods; the ideas which he presented to the minds of his pupils were all extremely simple; his means of instruction were distinctly subdivided, each part being calculated for a precise period in the progress of development; whatever was complicated and confused, he rejected; by a few words he conveyed much, and with little apparent exertion produced a powerful effect; he kept always close to the point then under consideration; some of his branches of instruction seemed like a new creation, raised from the elements of art and nature: all this I saw, and my attention was excited to the highest degree.

There were some parts of his experiment, it is true, which seemed to me rather unnatural; of this description was, for instance, the repetition of difficult and complicated sentences, which could not, at first, but make a very confused impression upon his pupils. But I saw, on the other hand, what a power he had of leading children into clear ideas; yet I mentioned my doubts to him. His answer was, that nature herself presented all sorts of perceptions to our senses in confusion and obscurity, and that she brings them to clearness afterward. To this argument I had nothing to reply,* especially as I saw that he attached no value to the details

*The obvious reply was, that the perceptions which nature presents, however confused, or otherwise obscure, they may be, are realities, and therefore contain in themselves the very elements of clearness, and at the same time, a strong inducement to search for those elements. But confused impressions made upon us by words, are not realities, but mere shadows; they have in themselves the elements of confusion, and they offer neither an inducement, nor the means, for clearing them up. The former call out the mind, the latter cramp it. The very power which Pestalozzi possessed over his pupils, what was it owing to, according to the statements both of himself and his friends, but to his making a rule of supplying the child with a clear and distinct notion of the reality, before he gave him the sign or shadow, the name?

of his experiment, but tried many of them with a view to throw them aside again, as soon as they should have answered their temporary purpose. With many of them he had no other object than to increase the internal power of the children, and to obtain for himself further information concerning the fundamental principles on which all his proceedings rested. I resolved, therefore, not to mind the apparent inadequacy of some of his means, so much the more as I had come to the conviction, that the further pursuit of the experiment necessarily involved the improvement of the details of the method. This was perfectly evident already in arithmetic, in drawing, and in the rudiments of language.

I perceived, likewise, that by the connection which his different means of instruction had with each other, every one of them, individually, was instrumental in promoting the success of all the others, and, especially, in developing and strengthening the faculties generally. Long before he began to lay down his principles in stated terms, I saw, in the daily observation of their practical effect, the approaching maturity of the whole undertaking, and, as an infallible consequence of it, the gradual attainment of the object he had in view. In trying the details of his method, he never leaves any single exercise until he has so far investigated and simplified it, that it seems physically impossible to advance any further. Seeing the indefatigable zeal with which he did this, I was more and more confirmed in a sentiment, of which I had before had some indistinct notion, that all the attempts at fostering the development of human nature, by means of a complicated and artificial language, must necessarily end in a failure; but that, on the contrary, a method intended to assist nature in the course of human development, must be characterised by the utmost simplicity in all the means of instruction, and more especially in language, which should be a faithful expression of the simplicity of both the child's own mind, and the objects and ideas which are employed for its cultivation. I now began to understand, by degrees, what he meant by introducing a variety of distinctions in the instruction of language; by aiming, in his arithmetical instruction, at nothing else but producing in the child's mind a clear and indelible conviction that all arithmetic was nothing else but an abridgment of the simple process of enumeration, and the numbers themselves nothing but an abridgment of the wearisome repetition, one, and one, and one, and one; and, lastly, by declaring an early development of the faculty of drawing lines, angles, curves, and figures, to be the groundwork of art, and even of the capacity, which so few men possess, of taking a distinct view of visible objects.

I could not but feel every day more confirmed in the notions which I had formed of the manifold advantages of his method, by being a constant witness of the effects produced by general development of the mental faculties in the arts of measuring, calculating, writing, and drawing. I grew more and more convinced that it was possible to accomplish what I have before stated to have been the leading object of my own pursuits at a previous period, viz., to re-educate mothers for the fulfillment of that sacred task assigned to them by nature, the result of which would be, that even the first instruction imparted in schools, would have previous maternal tuition for a foundation to rest on. I saw a practical method discovered, which, admitting of universal application, would enable parents, who have the welfare of their offspring at heart, to become themselves the teachers of their little ones. From that moment, popular improvement ceased to be dependent on the circuitous plan of training teachers in expensive seminaries, and with the aid of extensive libraries.

In short, the result of the first impression produced upon my mind by the whole of Pestalozzi's experiment, and of the observations I have since been able to make on the details of his method, has been, to re-establish in my heart that faith which I held so dear at the onset of my career, but which I had almost lost under the pressure of systems sanctioned by the fashion of the day, faith in the practicability of popular improvement."

In the progress of his narrative he declares himself, that it was one of the characteristic features of his method of teaching language, that he reduced it to the utmost simplicity, "by excluding from it every combination of words which presupposes a knowledge of language." He was not, however, at all times, equally clear on this point, although it lies at the very foundation of all his improvements in elementary instruction.

XIV. THE JESUITS AND THEIR SCHOOLS.*

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

In 1491, eight years after Luther, and six before Melancthon, Ignatius Loyola was born, the founder of that Order whose chief aim was to bring to nought the Reformation, and to reinstate the Popes in their former absolute power. The Jesuits sought, by means of preaching, the confessional, and the education of youth, to gain power and influence. And how great the influence, how complete the power which they thus obtained!

This aim and method of the Order is universally acknowledged: we find it asserted equally by the Protestant Ranke, in his work, "The Popes of Rome," and by the Popes themselves, as well as by the most distinguished Catholic friends of the Jesuits. In Pope Ganganelli's Bull, by which the Order was suppressed, it is described as having been founded for the "conversion of heretics;" in the Bull of Pius the Seventh, which restored the Order, it is said, that the Jesuits might, "after their former method, instruct youth in the first principles of the faith, and form them to good manners, might sustain the duties of the preacher's office, and be diligent in hearing confession;" and it is especially enjoined upon them, "to devote themselves, (as formerly,) to the education of Catholic youth, as well as to undertake the control of seminaries and colleges."

A Catholic writer of the present day speaks of the calling of the Jesuits in the following extremely candid manner: "that it is to contend with heretics, chiefly with the weapons of education and knowledge." "The hateful task of checking heresy by means of fire and sword, this the Order leaves to its antagonists, the Dominicans." This same Catholic author thus writes in the year 1833: "We know both when and how the Order of the Jesuits originated; we know the *genesis* of the Society of Jesus. At the commencement of the

* Sources.—1. Ranke's Popes of Rome.

" 2. Spittler on the History and Constitution of the Order of the Jesuits.

" 3. Pascal's Provincial Letters.

" 4. Ratio et institutio studiorum societatis Jesu; Superiorum permisso: Moguntiae, 1600

" 5. Educational System of the Society of Jesus; Landshut, 1813.

" 6. Lang's History of the Jesuits in Bavaria; Nuremberg, 1819.

The above are some of the principal sources from which Von Raumer drew his views of the Jesuits.

sixteenth century a storm had gathered against the church of Jesus Christ. A new doctrine was proclaimed, another faith preached; a deadly heresy had exalted itself. The world was drifting toward the quicksands. And as every heresy contains some element of truth, sufficient to give it a specious appearance, and to insure its reception among men, so in this case we find such an element in the estimation it placed upon the study of the Scriptures, in the absolute homage and unqualified respect that it paid to the pure, unaltered word of God, as recorded in Holy Writ,—in its faith in the written word alone, which it claimed was given to every man to examine for himself; and this homage and respect culminated in the complete deification of the letter. But in whatever spot the earth yields a poison, there an antidote is sure to spring up by its side. So too, if at any time storms overspread the sky, God, in his providence, soon puts an end to their fury. Does any foe to the Bride of Christ, the church of God, declare war against her, then, even in the very fiercest of the onset, when her defeat seems inevitable, God raises up a hero, who goes forth in the name of the Lord, single handed and alone, and, like a second David, overcomes the champion of error. Such a hero was Ignatius Loyola, who, in the year of grace, 1521, most fortunately for the world, lay wounded in the fortress of Pampeluna. The wounds which he had received in his body healed in a miraculous manner the hurt of his soul, and thereby healed the spiritual diseases of the greater portion of mankind. God created this man to be the founder of an Order, which was destined to become a strong wall of defense for his holy church against the new heresy. Examination of the letter of the word, as we said above,—investigation, consequently knowledge, characterized this false doctrine. Hence the Order which was to defend men from its allurements and to confirm them in the old faith, found itself compelled to put on the same armor of knowledge, that it might win the victory. If, with other Orders, contemplation and mortification of the flesh stood foremost in importance, while study was a minor concern, with the Jesuits, on the other hand, study and the pursuit of knowledge constituted the chief aim, though prayer, meditation and devotional exercises were not omitted. For they felt that erudition and knowledge must be united with piety. And they turned their attention to those youth, who were eager to run in the ways of knowledge; to studious youth, to protect them from the pestilent breath of false doctrine, presenting itself in the guise of science. Accordingly schools and the education of the young were their chief care and the main object of their efforts. And God blessed the Society, so that, in a very short time, it extend-

ed its operations into all parts of the globe. And it was not long before the fathers of the Society of Jesus took possession of nearly every nation on the earth, as the apostles had done before them; and wherever they established themselves, they undertook the management of schools, and the direction of such as thirsted for knowledge, and their efforts were prospered and blessed. God grant that we may soon see such an Order arising in our midst, for we too live in an age full of all manner of heresies!"

[We omit in this place, as well as toward the close of the article, several pages of Raumer's chapter on the Jesuits, in which he discusses, from the extreme Protestant stand-point, the influence of the confessional, and the principles of what he calls "Jesuitical morality." These topics, and especially, when handled in a partisan spirit, are more appropriate to a theological and controversial, than to an educational journal. The past, as well as the present organization of the schools of the Jesuits,—the course of instruction, methods of teaching, and discipline, are worthy of profound study by teachers and educators who would profit by the experience of wise and learned men. Says Bacon; "As it regards teaching, this is the sum of all direction; 'take example by the schools of the Jesuits, for better do not exist.'" *ED. AM. JOUR. OF ED.*]

The editor of the "System of Education" has adopted the above words of Bacon for his motto, and has cited, in addition, the following testimony from that philosopher. "When I look at the diligence and the activity of the Jesuits, both in imparting knowledge and in moulding the heart, I bethink me of the exclamation of Agesilaus concerning Pharnabazus; 'since thou art so noble, I would thou wert on our side.'" The editor of the "System" boasts of this passage as a "splendid tribute extorted from an anti-Catholic and a heretic."

I will now subjoin a second tribute, likewise from a "heretic," viz., John Sturm. "The name, Jesuits," says he, "is new, and of recent origin. They merit higher praise than do any other of the monks, if indeed we may praise monkery at all. For what neither the good and devout Reuchlin, nor the learned and eloquent Erasmus, nor, prior to these, Alexander Hegius and Rudolf Agricola could persuade the schoolmen and the monks to do, namely, that they should, if not disposed themselves to cultivate learning, at least train up others to do it; this the Jesuits have, without prompting, everywhere undertaken.

They give instruction in the languages and in logic, and so far as they can, they impart to their scholars a knowledge of rhetoric. I rejoice at their appearance for two reasons. And first, because they promote our cause, by cultivating the sciences. For I have observed

what authors they explain and what method they adopt; it is a method so nearly like ours, that it appears as if they had copied from us. And secondly, they incite us to a greater watchfulness and zeal, lest they show themselves more diligent than we, and lest their scholars become more learned and accomplished than ours."

If now we compare Sturm's mode of teaching with that of the Jesuits, we shall find, at the first glance, scarce any difference between them. The internal structure of their institutions, their text-books, general curriculum, and ideal of culture, all are nearly identical, and yet a Jesuit college in respect to its inmost design and aim differed as widely from Sturm's college or his gymnasium, as a Jesuit from a Protestant.

The "*Ratio et institutio*, (theory and method,) *studiorum societatis Jesu*," is the oldest treatise on teaching that the Jesuits possess. It was originally projected in 1588 by six of the fathers, and after undergoing a thorough revision, it was finally published in the year 1599. It appeared under the sanction of the renowned Claudius de Aquaviva, who was general of the Order at that period. This treatise has maintained, even to the present day, its original authority, and all subsequent writers have built upon its foundation; we have an evidence of this fact in a later treatise, written in 1730, which, in its turn, has been, in the main, incorporated into the "Educational System" of the year 1833. So too, the Jesuit General Roothaan, in the preface to the most recent official "Course of Instruction," published in 1832, remarks; "we present herein nothing new, but the old original system, only modified to suit the times." For "this old system has been approved by the fortunate experience of almost two centuries, and it should not be altered, except for weighty reasons." Some alterations were made, as we see, in obedience to the demands of the age; a nice adaptation of fixed principles to the variations of circumstance being characteristic of the Order.

We turn now to consider the internal structure of a fully organized Jesuitic college. Such an institution embraced two distinct courses of study, each complete in itself. These were known as the higher and the preparatory branches, "*studia superiora*" and "*studia inferiora*." Each division of the college was under its separate prefect, but both prefects were alike subject to the rector, who had the general control of the whole establishment.

PREPARATORY OR LOWER STUDIES.

The lower division, corresponding to the gymnasium, comprised the following five classes, each having its particular name:

1. The lower class in grammar; or the rudiments.

2. The middle class in grammar ; or grammar proper.
3. The higher class in grammar ; or syntax.
4. The Humanities.
5. Rhetoric.

These names lead us to infer at the outset a general resemblance to the course pursued at Sturm's gymnasium, where grammar was the beginning, and rhetoric the end and aim of all education, and when the art of speaking Latin was the summit of all culture. Says the composer of "The Educational System of the Jesuits:" "not a mere knowledge of syntax, but a practical mastery of it, in other words, readiness and skill both in speaking and in writing; this is the aim of grammar." Pupils are "to make a living language of the Latin, hence they should be taught on the principle of the maxim '*lege, scribe, loquere.*'" "Those alone possess a perfect knowledge of a language, who not only read it, but who can likewise speak it and write it. And the course of study adopted by the Society of Jesus is designed to secure this result. The pupils of the Jesuits are enabled not only to read and write Latin, but really to speak it."

As the Jesuits and Sturm appear thus to have coincided in the pursuit of a common aim, it is but natural to suppose that their methods of indoctrinating their scholars with Latinity would have been the same or similar. To say nothing of the study of grammar, we find in both instances an absolute sacrifice of every thing to the single object of storing the mind with a multitude of Latin words and phrases. The "System" recommends the use of books in which such phrases are collected and methodically arranged; such a book is the "Latin-German *Promptuarium* of Father Wolfgang Schoensleder." Another, recommended for the three lower classes, is called "*Amalthæa*;" it is divided into six parts, each part containing a great variety of idiomatic forms and phrases. Part 6, for example, treats of the arts; chapter 1, of medicine, 2, of surgery, 3, of arithmetic, 6, of printing, etc. "Through the number and variety of phrases thus rendered familiar to the mind," it is said, "style will assume color, grace and dignity."

For the sake of a pure Latinity, the Jesuits crushed out the vernacular, precisely as did Trotzendorf and Sturm. "The exercise of speaking Latin must be unintermitted and absolute, to the entire exclusion of the vernacular in all matters pertaining to the school." This rule extended even to the lower classes in grammar; "the lowest it may be, being on some occasions excepted." In order to encourage excellence in Latin speech, "the teacher should repeatedly appeal to the stately elegance of the language, and on the other hand should con-

tinually dwell upon the disgrace which is sure to overtake pupils in Latinity if they can not carry on a conversation in Latin." The negligent must be reprimanded, "and those who let fall a word in the vernacular must be compelled to wear some mark of disgrace, and in addition, to suffer a light chastisement, unless they can shift this two-fold burden, on the same day, upon the shoulders of some fellow-pupil, whom either in school or in the street they shall overhear talking German, or whom they can convict of this offense by at least one credible witness." "This *noble emulation* should prevail as well among pupils of the same school as between one school and another." The noble emulation here insisted on I shall advert to again, further on.

Of the study of the classics the "Educational System" says: "For us the pagan writers of classical antiquity can have but a subordinate aim, namely, the formation of style. * * * By means of the classics we are to become familiar with the language of the Greeks, but especially with that of the Romans, and thus to form our style; *further than this we can not go.*" As the Jesuits thus aimed only at the cultivation of style in reading the classics, they, like Sturm, prized Cicero above all the rest. On this point hear the "Educational System:" "Style should be drawn almost exclusively from Cicero, although the most approved of the historians need not on that account be overlooked." And again; "What model is to be imitated and after what pattern we should fashion our style is briefly comprehended in the words of the rule, 'imitate Cicero.' As in the study of theology we follow the divine Thomas (Aquinas,) and in philosophy, Aristotle, so in the humanities Cicero must be regarded as our peculiar and preëminent leader. For he has been crowned with the palm of superior praise by the common consent of the world. But some, misguided by a willful and self-formed taste, have gone astray, preferring a style totally different from that of Cicero; such an erratic course is quite at variance with the genius of our institutions and hostile to that spirit of *prompt obedience*," etc. "An abrupt and clipped style was discountenanced by the venerable precepts of those of our forefathers who gave their particular attention to this subject." Since Cicero was the highest model for imitation, he was read by all the classes; the three lower classes especially, were drilled in the "Familiar Letters," as they are styled in the "System."

Both in conversation and in writing, the scholars are to use no expression "which they can not justify by the authority or example of some approved writer." This precept, taken in connection with the

foregoing quotations, proves that the pupils of the Jesuits were required to reproduce, in speaking and in writing, almost universally, the phraseology of Cicero, carefully culled out and stored in the memory. Latin poems were in like manner pieced together out of lines or expressions taken from Virgil. Latin dramas too were acted, not however, the old plays of Terence and Plautus, but such as were composed for the purpose. "For it is not proper in every act to introduce demons, heartless knaves, tipplers, gamblers, and profane jesters, nor ought dancing or the shifting shows of gliding specters and ghosts to be often brought upon the stage." "These plays, pure as may be their style, and well adapted as they are to impart finish and grace to the pupil's knowledge, nevertheless ought not to receive so much attention in our eagerness for the favor of the people, that we shall meanwhile, neglect the true interests of the school."

In one respect the Jesuits appear to have acted with more directness of purpose and practical good sense than did John Sturm, with his like-minded Protestant compeers; for the former knew why they wished to substitute Latin for the vernacular. The editor of the "Educational System" says to this point; "The schools of the Jesuits were so conducted throughout, as to bring youth completely under the dominion of the true church. To this end every regulation, from the least to the greatest has been uniformly directed." It was to serve the Romish hierarchy then, to further its schemes of universal aggrandizement by means of the powerful instrumentality of a common language, extending to all the nations of the world; it was, I repeat it, to serve this hierarchy, that the Jesuits banished the vernacular from their schools to make room for the Latin. With the aid of this language they hoped measurably to overcome every obstacle, that deep-seated national prejudices should oppose to their onward career, and to build up a spiritual kingdom whose dominion should embrace the whole world. Already the church had her authorized Vulgate version of the Scriptures in Latin; already was her liturgy in Latin, so that in all Catholic churches founded anywhere in the world, the Roman Breviary was read, nor was any departure from its language in any case permitted.

The Jesuits taught Greek also. That scholars as well as teachers, were at least somewhat accomplished in this branch, is evident from the fact that they gloried in being able not only to speak Greek but to compose Greek poems. Frederick A. Wolf, the most eminent philologist of the present day is, like Luther and Ernesti, decidedly adverse to Greek composition. When, on the occasion of an examination for degrees, a Greek thesis was called for, he said, "among a

hundred school teachers and school directors selected from the whole of Germany, we shall not find ten who could write such a thesis with even ordinary accuracy." Speaking, again, of a similar occasion, when many of the examiners required skill and elegance in Latin composition of the pupils, he said: "Those who open their mouths the widest in these demands, can not themselves do what they require of others."

How eagerly would the editor of the "Educational System" seize upon these admissions of the great Protestant philologist as proof of his own repeated allegations. "It were a difficult task," he says, "to determine the precise position which the study of Latin occupies at the present day. The teachers of the language are themselves without a perfect knowledge of it, and how then can they impart what they do not possess? Verily, the Latin language has suffered a second death among us, and those old worthies, (the Jesuits,) who were gifted with the magical power to raise the dead, have all passed away. Boast not, O short-sighted present age, of thine erudition; blush rather on account of thy shallowness, and mourn over thy distance and estrangement from the spirit of the classics."

In another place he says: "Tell me not that you have mastered the Latin or the Greek languages, when you are unable to speak them. The Jesuits and their pupils were able both to speak these languages and to write them. Many, very many of them wrote hymns and odes, yea, *epics* in Latin and Greek, as none but a Latin or Greek poet could have done; so that their productions, if compared with the works of Greek and Roman poets, would not be found wanting. The libraries of the Society of Jesus contain works composed by Jesuits, such as speeches, histories, epic poems, (Christiada, for example,) both Latin and Greek, which bear the classical stamp, and whose authors rank, both in range and power of expression and in genuine artistic excellence, with Demosthenes and Cicero, with Thucydides, Livy or Tacitus, with Homer and Virgil." Truly, this advocate of the Jesuits, open his mouth wide as he may, to use Wolf's expression, can give us no stronger proof of his own utter lack of high classical culture, than by thus inviting all the world to seat themselves as disciples at the feet of the Jesuits, while he himself can not even write good German!

In addition to the languages I find but one other branch of instruction particularized, and that is given under the name of "*erudition*." What this comprehended we can only know approximately by a comparison of various passages in the "System." In one place we are told "that the pupils by diligence in writing will attain to those

honorary grades, whose names, to savor of *erudition*, have been derived from the civil or military polities of Greece or Rome." In another, it is enjoined, "in the interval between the examination and the distribution of prizes to employ the pupils in agreeable exercises, such as those which pertain to *polymathy* or philology, to arithmetic, to orthography, and to every species of *erudition*." Or, "at this time some questions in *polymathy* or in the higher *erudition* should be discussed; or again an exercise in arithmetic may be taken up, combined however, with an explanation of the principles involved in the exercise." Further on we find the following: "Erudition is to be gathered by the scholars from the history and the manners of nations, from the opinions of authors, and, in short, from the entire teachings of the school." "At the examinations, the scholars are to be called upon for specimens of the *erudition* previously laid before them, viz., for fables, historical incidents, antiquities, responses of oracles, sayings of wise men, examples of strategy, famous deeds, inventions of every sort, customs and institutions of various nations, eminent virtues," etc.

But the most varied array of topics comprehended in *erudition* is the following: "in the holidays, attention may be given to some of the less familiar subjects, as hieroglyphics, emblems, with questions bearing upon the art of poetry, (taken from the Poetics of Aristotle or of Father Jayi,) relating to the epigram, the epitaph, the ode, elegy, epic poetry, and tragedy; the Roman and Athenian senate, the art of war among the ancients, horticulture, dress, the banquet, the triumph, Sybils and other characters of a similar class: add to these, Pythagorean symbols, apothegms, proverbs, and parables, etc.; moreover, inscriptions on shields, temples, and monuments, gardens, statues and the like; also fables, Roman antiquities, remarkable events, oracles, military stratagems, brilliant achievements, descriptions," etc.

From the foregoing quotations, we leave the reader to form his own idea of the nature of this *erudition*. How much the Jesuits left untaught, we deem it hardly necessary to mention. Besides Latin, which occupied by far the largest share of the time devoted to study, they imparted a knowledge of Greek and of *erudition*. They likewise gave religious instruction, of which we shall speak further on. There was no place given to German, geography, mathematics, music, and the like; the narrowness of their curriculum even surpassed that of Sturm's. But, in this respect, their modern scheme of study, published in 1832, indicates progress. "The demands of the age," they say, "constrain us, in some points, yet without prejudice to the cause of sound learning, to depart from the usages of our fathers; and compliance with these demands is not only not forbidden, but it is rather

required by the spirit and design of our establishment,—which is, to promote the greater glory of God.” Accordingly natural philosophy, mathematics, and German are now taught by the Jesuits.

THE HIGHER BRANCHES.

Pupils usually spent one year in each of the four lower classes of the gymnasium, and two years in rhetoric. They then passed to the higher branches, and first of all, to a two or three years’ course in philosophy.

The professor of philosophy adhered, in the main, to Aristotle, so far as he did not clash with the doctrines of the church, “though Averroes, when he came upon any thing good in him, did not praise him for it, but sought to prove that he borrowed it.” On the contrary, “the professor should make honorable mention of our holy Thomas (Aquinas,) should delight to agree with him, and dissent, where necessary, with great reluctance.” The first year Aristotle’s logic was taught; the second, his books “*de coelo*,” the “*de generatione*,” and the “*Meteorologica*,” the third year, the second book of “*de generatione*,” the books “*de anima*,” and the metaphysics. A critical exegesis of the original text was recommended, as well as systematic disputations on particular topics in hand.

A special professor of morals lectured upon the “ethics” of Aristotle.

A professor of mathematics explained the elements of Euclid to the class in “physics;” he touched likewise upon geography, or upon the “sphere,” and kindred topics, “which subjects pupils always take hold of with eagerness.”

At the close of the philosophical course, those whose qualifications were suitable, entered upon the study of theology; this extended over a period of four years, under the direction of professors of sacred literature, of Hebrew, of scholastic or doctrinal theology, and of casuistry.

The professor of sacred literature was expected to make use of the Vulgate version, only referring in brief, and where indispensable, to the Greek and Hebrew originals; to cite the Chaldee and other versions, the Septuagint especially, where these establish the Vulgate and the teachings of the church. He was not to give much attention to the interpretations of the Rabbins, nor to devote much time to chronology, the geography of Palestine, and similar inquiries of minor importance; unless a passage absolutely demanded an allusion to them.

The professor of Hebrew was likewise to hold by the Vulgate; in teaching, he should begin with the elements, then explain one of the simpler books of the Old Testament; and he should teach in such a manner, that, by his assiduity and care, the strange and uncouth vis-

age, which the Hebrew presents to some minds, should grow mild and attractive.

The professor of scholastic theology based his teachings upon the system of Aquinas, (whom the Jesuits regarded as peculiarly their own teacher,) and he was expected not merely to explain and to commend the doctrines and opinions of Aquinas to his class, but likewise warmly to defend them. In no point was the professor to deviate from the system of doctrine prescribed by the church.

It was the duty of the professor of casuistry, fitly to mould the young theologian to the office of pastor and priest. He expounded the nature of the sacraments, and descanted upon the various positions and duties of men. With theology proper, he had little to do. He gave decisions of doubtful questions, resting his decisions upon authorities, though not multiplying these unnecessarily. "But, while thus fortifying his own position, he should not neglect to cite those authorities, if any there are, of equal weight, which appear to warrant an opposite conclusion." Disputations likewise, on cases of conscience were recommended.

These theological classes formed the source from whence the Order drew a supply of teachers for the gymnasias.

The Society received at the hands of Pope Julius III. the power of conferring both Bachelor's and Doctor's degrees upon such as did not take a University course.

Having now given an outline view of the entire educational course of the Jesuits, I come to the moral and religious character of their system, to its discipline.

"Religion," says the composer of the "Educational System," "is the base and the summit of schools and of all education, their foundation and their capstone, their central principle and their soul; therefore the religious should be chosen for teachers, and with peculiar propriety too, from that Order, which has always stood foremost in the great work of instructing the young, viz., the Society of Jesus." With this Order "the religious principle was not a mere name assumed for ulterior ends, it was not a false banner hoisted for the purpose of deception." It "protected youth from vice, and with a peculiar care strengthened them against every spiritual ailment." "The religious alone can save the schools from perdition; a religious fraternity alone, an Order, which has received the sanction and consecrating influence of the church of Christ, this alone can avert the overwhelming destruction that is now settling down upon education and upon schools, sinking them deeper every day, and preparing them ultimately to become instrumental in subverting both thrones and governments."

The method of heretics in education is represented as directly the reverse of that of the Jesuits, viz., as superficial, utterly godless, subversive of morality and the fruitful parent of revolutions.

But the moral and religious character of a Jesuitical institution needs a closer examination at our hands. It is repeatedly urged in the "Jesuit System of Education" as a first principle, to instil into the minds of youth a knowledge of the Creator and the Redeemer; so that at the same time with earthly knowledge, they may acquire habits and sentiments worthy of Christians. "The young are formed to obedience, to love of God and to virtue." "The teacher must set them an example of a religious life, must do nothing whereby the pupils will offend, must pray for them." He must "with great faith and confidence commend them to the most Blessed Virgin and to the Saints of God, chiefly to such as have ever been held as the special and peculiar patrons of studious youth, as St. Joseph, St. Catharine, St. Cassian, St. Nicholas, our holy Father Ignatius, St. Lewis, St. Stanislaus," etc.

Great stress is laid upon that humility, "that seeks not the perishable honors of this world, but the enduring honor which comes from God." "Every thing bordering on vice or in any manner inconsistent with the precepts of Christian morality should be stigmatized as disreputable and mean. Pride, boasting," etc. Obedience was not only drilled into the scholars, but it was required of the teachers too. "Every will," remarks the editor of the "Educational System," "is merged in the will of one superior; and his will is to be honored and obeyed as the will of Jesus Christ."

What kind of obedience was demanded, we saw above in the cursory remark, that an un-Ciceronian style was to be shunned as a violation of the grand law of obedience. In short, all were made to feel that a blind and slavish obedience was universally demanded, and that all, teachers as well as scholars, were, so to speak, wheels of one vast machine, whose main spring was the general at Rome.

The nature of the prayers enjoined upon the pupils may be inferred from what we have already advanced, but to put it beyond all doubt, we will appeal to the record. It is prescribed to the teachers, "to be faithful to the scholars, and to habituate them to the use of certain set forms of prayer to God and to the saints. These they may repeat, now from a book and now from memory, lest by monotony they grow irksome; or at times they may go through with them in silence and mentally. They should chiefly make use of the Rosary, Office, and Litany of the Blessed Virgin."

"He who has omitted his devotions, must, for a *punishment*, spend

some time in prayer, in the oratory, or if it is a feast day, must attend a second mass, or he must go to the first mass or one of the first at early dawn, in the church." If these punishments appeared hard, so the reward, on the other hand, was great, viz., "those who distinguish themselves by superior devotion, shall be publicly rewarded and honored." Truly, with such motives, both of punishment and reward, piety could not well remain stationary!

And if devotion was thus crowned with honors, with public honors, much more so was diligence and other subordinate virtues.

"He who possesses the faculty of inspiring a spirit of emulation, finds the duties of his office wonderfully lightened thereby; in fact an active emulation is almost of itself sufficient to direct the young in the right path. The teacher should, therefore, put a high estimate upon this instrumentality, diligently examining the modes in which it may best be secured and applied." "Regular contests for the superiority are of great use in calling out this emulation."

The "System," makes frequent mention of such contests, and communicates a method by which they are rendered more advantageous, viz., by assigning to every scholar his special rival, thus dividing the whole school into pairs. The mutual relation of two such rivals is often adverted to and commended for the reason that it gives to each continual opportunities for informing of and triumphing over the other. For example, "those who fill the position of rivals should note any breach of good behavior in each other, and report it for reprimand," etc.

Pupils were not expected to confine their attention to their rivals, but to inform of any other of their fellows whenever their own interests should require. An instance in point has been given already; viz., "where one who had spoken in German instead of Latin, had been sentenced to disgrace and punishment, he was permitted to go free by transferring the penalty to some fellow pupil, whom he had heard likewise speaking in the vernacular, either in school or in the street, or whom he at least could convict of so doing, out of the mouth of one credible witness." The natural effect of such an unholy emulation was to destroy utterly all mutual confidence and love among scholars. They could not love each other, for their entire feeling was that of slavish subordination, and they regarded their fellows who were in the same position with themselves, as natural enemies to be put down in every possible way. In every way,—I repeat it,—even by a petty species of tale bearing that was revolting to every noble instinct of manliness; though it was admirably designed to prepare the pupil for the perfected system of delations to which the Order

was chiefly indebted for its power. Even the Jesuit Mariana has testified against this system: he says, "the whole framework of the Society rests upon its *delations*, which spread, like a poison, through every portion, so that all confidence between the brethren comes to an end. Our general, out of his unbounded desire for absolute dominion, receives these delations into his archives, admits their truth as a matter of course, and acts upon them without giving the accused parties the least opportunity to be heard in their own defense." And yet, notwithstanding the existence of this emulation which does not scorn the basest measures, if they only lead to the grand aim, the elevation of the pupil above his fellows, notwithstanding such a systematic cultivation of pride,—with which, remember, a slavish subjection to the superior goes hand in hand,—the "System" is perpetually boasting of the importance to be attached to humility. Humility indeed! It would do better to call it the extorted obedience of a slave.

We find other methods laid down in the "System," which the teacher "may adopt to quicken a spirit of emulation." Take the following, for instance: "the election of magistrates, praetors, censors, and decurions in the school, will prove a powerful auxiliary in accomplishing this object, (viz., arousing competition.)" Such officers were likewise created by Trotzendorf and Sturm, as we have had occasion to observe. Said Trotzendorf, "I do it, in order that my scholars may be early trained to the usages of a well ordered civil government." And Sturm's decurions were, like Lancaster's monitors, the same as assistant teachers. But the magistracies of the schools of the Jesuits appear, on the contrary, to have been created solely to engender ambition; the decurions may perhaps have corresponded in a measure to those of Sturm's school, but the censors were formally installed to be spies upon their fellow pupils.

And again; "to provoke emulation the teacher should inculcate upon the scholars the sentiment, that it is the height of honor to outstrip one's equals; and, on the other hand, that nothing is more degrading and contemptible than to be outstript by them." The distribution of prizes too, was especially relied on to stimulate competition. "The public distribution of prizes must be ushered in by all manner of imposing ceremonies, and attended by a thronged audience. Let a comedy be acted before the distribution; then let the names of the successful candidates be publicly proclaimed, after which, the prizes may be formally presented, and a short and appropriate poem, which has previously been submitted to the praefect and approved by him, may be pronounced. After the victors have thus been proclaimed by

the herald and rewarded, the names of those who stand next in rank may be read."

Still another method of kindling emulation is "for the scholars to yield the priority to those who take the first rank, not only in the school but out of school, and everywhere and on all occasions." "There are some teachers who cause to be inscribed in some public place whatever may have been ingeniously elaborated, gracefully said, admirably explained, or skilfully invented by any scholar, so that this memento of the successful achievement may redound to the perpetual fame of that scholar throughout the learned world. Some too, place in the middle of the school-room, or, perhaps, in a corner, a dunce bench, giving it some opprobrious name, such as the gate of hell, etc. Whoever occupies this seat is to be branded with some mark of reproach, and to wear a humiliating motto; but he may, nevertheless, be released from his disgrace, provided that, by a more perfect recitation or a superior essay he *shall surpass one of the other scholars*." Such are the doctrines of honor of these Jesuit teachers.

Corporeal punishment was seldom inflicted. "Let the master correct no one with his own hands, but on those rare occasions where our method of education permits chastisement, in those extreme cases when it is necessary to resort to the rod, let the corrector be one who is not a member of the Society." So when the Inquisition was established through the zeal of Caraffa and Toledo, though Loyola favored the plan before the Pope, yet neither he nor his Order would have any thing to do personally with the punishment of heretics, choosing rather that such punishments should be inflicted by those who were in no way connected with the Society. And, finally, this most characteristic caution is given, viz., "In order that the master may the more discreetly observe this method of punishment, he is constantly to consider that those, whose age and condition now appears to be feeble, unworthy of consideration, and, perhaps, contemptible, will, in a few years, grow up to manhood, and, as human affairs often turn out, will, haply, arrive at honor, wealth, and influence, so that their favor will be an object of desire and their power, of conciliation. Let the master consider these things, and be governed by them both in his words and in his actions."

An accurate and thorough knowledge of the character of the scholars, as a basis for discriminating and judicious authority over them, was furnished by the confessional. All the letters that the pupils wrote to their parents and relatives, as well as all those which they received, passed under the inspection of their teachers.

[The schools of the Jesuits are not merely an institution of the past. They are now in successful operation in this, as well as in nearly every country in Europe; and they are still conducted substantially on the "*Ratio et institutis studiorum societatis Jesu*" first published in 1599, with such modifications as to studies, and methods, as the progress of science and the demands of the age require. The only way, in our country and in this age to "put down" such schools, which have their roots in the past, and which have been matured, after profound study, by men who have made teaching the business of life, from a sense of religious duty, is to multiply institutions of a better quality, and bring them within the reach of poor but talented children. We have no fear of perverting the faith, or the educational views of the readers of this Journal, by inserting in our pages, full descriptions of the best institutions of the Order in this, or any other country. Of course such descriptions will be open to fair criticism from any source. Ed.]

XV. WOLFGANG RATICH.

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

WOLFGANG RATICH was born in 1571, at Wilster in Holstein. He attended the Hamburg gymnasium, and afterward studied philosophy in Rostock. On account of a difficulty in his speech he gave up theology, turned his attention especially to Hebrew, and went to England, and thence to Amsterdam, to study mathematics. Here he remained eight years, and learned Arabic of a native-born Arabian. Here, also, he offered to present to Prince Moritz, of Orange, a new method of instruction, as discovered by him. The prince agreed to his proposal, but on the condition that he should teach Latin only. Dissatisfied with this restriction, Ratich went to Basle, Strasburg, and also to other courts, offering his new method. He finally offered "to the German Empire," May 7th, 1612, at the diet at Frankfort, a memorial,* in which he promised, "with the help of God to give instructions for the service and welfare of all Christendom :

1. How the Hebrew, Greek, Latin, and other tongues may easily be taught and learned both by young and old, more thoroughly and in shorter time.

2. How, not only in High Dutch, but, also, in other tongues a school may be established, in which the thorough knowledge of all arts and sciences may be learned and propagated.

3. How, in the whole kingdom one and the same speech, one and the same government, and finally one and the same religion, may be commodiously and peacefully maintained.

The better to exemplify this," he continues, "he is prepared to show written specimens of the Hebrew and Chaldee Scriptures, and of the Arabian and Greek, Latin and High Dutch languages, from which a full opinion may be formed of the whole work."

Ratich now proceeded to attack the usual methods of instruction. It is the course of nature, he says, first to learn to read right, and speak the mother tongue correctly and fluently, so as to be able to use the German Bible. Hebrew and Greek come next, as the tongues of the original texts of the Bible. Next comes Latin, which may be learned from Terence ; or jurists may learn it from the Institutions. Elsewhere German should be used in all the faculties.

* I received a copy of this memorial by the kindness of Herr Archivist Doctor of Law Hertzog, in Frankfort.

After the reading of this memorial, Pfalzgrave Wolfgang Wilhelm von Marburg gave Ratich five hundred *gulden* to buy him the necessary books; Landgrave Ludwig von Darmstadt appointed, and professors Helwig and Jung of Giessen, to make reports to him upon Ratich's mode of instruction. In 1613 the widowed Duchess Dorothea von Weimar summoned an assembly of learned men at Erfurt to examine the method. At the request of the same lady, Professors Grawer, Brendel, Walter, and Wolf of Jena, investigated Ratich's method. Their report appeared soon after that of Helwig, and both were decidedly in favor of the new method.*

In 1614 the church and school authorities of Augsburg invited Ratich thither to reform the schools of their city. We know nothing more of his stay there.†

The Duchess Dorothea summoned Ratich to Weimar as early as 1613 to instruct her and her sister Anna Sophie, both princesses of Anhalt, in Latin. In 1617, she gave him, for the promotion of his plans, two thousand *gulden*.

In the same year, 1617, Ratich was again at Frankfort, where he petitioned the town council to appoint an agent to whom he might explain his method. The agent was appointed, reported, and the council thereupon decreed that "Ratich should be notified that he had permission to apply elsewhere at his convenience."

Prince Ludwig von Anhalt Köthen first met Ratich in 1613,‡ at Weimar, with his sisters, the Duchess Dorothea, and the Countess Anna Sophie von Schwarzburg. Both urgently recommended Ratich to him. In 1616 he invited him to Rheda in Westphalia, and was so much pleased with his plans that he requested him to take up his abode near him. April 10th, 1618, Ratich came accordingly to Köthen; and explained to the prince, that "his structure was ready prepared to his mind, but that the workmen were wanting to help put it up." He settled in Köthen for a time, on account of the purity of the German spoken there, to make a trial of his system for teaching foreign languages, but especially to establish a good German school.

Prince Ludwig repeatedly applied to the other princes of Anhalt to assist him in carrying out Ratich's schemes, but in vain. His brother, Prince Christian, wrote to him that Ratich's views were praiseworthy, but that "it is the work that praises the master," and

* Duchess Dorothea refers to both in the letter of invitation which she gave to Ratich, 8th of May, 1613, to the magistrates of Frankfort, when he left Weimar for that city. Of this I have a copy.

† Report B. of Dr. Niemeyer, p. 11. We shall hereafter see two reports from fellow laborers of Ratich, at Augsburg.

‡ According to Prince Ludwig's own account, it was in 1618. See Niemeyer, p. 6, &c.

it was best to wait for the result. He advised to have the system examined by Rector Wendelin of Zerbst, for which purpose he said he would gladly use his influence. But he soon afterward declined to do even this.* Only Duke Johann Ernst von Weimar, son of the Duchess Dorothea, and nephew of Prince Ludwig, united with him in the undertaking to call into life the new method of instruction at their common expense."

Ratich† now formally bound himself to the work which the Prince wished him to undertake: namely, that of instructing and training teachers, so that they should be able "to impart to their pupils a thorough, good, and fluent knowledge of any language, especially of Hebrew, Greek, and Latin, in less time, not to exceed half as much, than could be done by any other method usual in Germany, and also with much less pains." These teachers were, on the other hand to promise him upon his requisition not to reveal the secret of his method to any one.

The prince now caused a printing office to be erected at Köthen, for supplying Ratich's books. The founts for six languages were partly brought from Holland, and partly cast in Köthen; and four compositors and two pressmen were brought from Rostock and Jena.

The prince required the people of Köthen to send their children to the schools established by Ratich; two hundred and thirty-one boys, and two hundred and two girls were enrolled.‡

The schools were divided into six classes. In the three lowest the mother tongue was taught, in the fourth a beginning was made with Latin, and in the sixth with Greek.§ According to the plan, his teacher of the lowest class, was to be a man of kind manners, who need know no language except German. His duty was to be, "by daily prayer, short Biblical texts, and questions in the manner of ordinary conversation, to form the tongues and language of the new scholars, according to the pure Misnian dialect, and by continued practice to correct the faults of the scholars, acquired outside the school.¶"

We shall see, further on, the methods of teaching German and

* Niemeyer gives a French letter from Prince Christian, of 8th of September, 1618. He writes *literatim* as follows: "Puis donques qu'il vous tarde que je me resolvé sur l'affaire du Ratichius. J'ay suis delibere de ne me vouloir pas mesler. Et ce a cause que nul de ceulx auxquels J'ay parle depuis, (vous asseurant en avoir parle avec divers personnages qui ont renommée d'estre doctes), ont voulu croire que les Effets seront conformes a ses propositions m' alleguants force Exemples au contraire en Hassie, en la Comte de Nassau, de Hanau, chez ma. le marg. de Bade, a Augusta et a Basle meme." Comp. Niemeyer, C. p. 13.

† Niemeyer, C. 10, 15.

‡ Ib. 24.

§ Niemeyer, C. 24. On comparing pp. 28 and 42, it does not appear whether there were five or six classes, and whether Greek was begun in the 5th or sixth.

¶ J. C. 29.

Latin in Ratich's schools. Here it must suffice to say, as to the instruction at Köthen, that as soon as the children had learned their letters, in the first (lowest) class, they learned reading and writing together, in the second, using Genesis for a reading book. In the third class was studied "the grammar of the mother tongue, with examples both general and special; that is, to speak and write grammatically, and to understand the grammatical speaking and writing of others.*

In the fourth and fifth classes, Terence was studied, and the Latin grammar abstracted from it; after this there followed an especial Greek class.†

Besides these lessons in language, there was instruction in arithmetic, singing, and religion.

Ratich's labors at Köthen, however, as in other places, soon came to an end. There were various reasons for this. One was, that Ratich was a strong Lutheran, while the city of Köthen was of the "reformed" persuasion. The citizens also took offense at Ratich's having the ten commandments learned in his school, not after the reformed text and division, but after the Lutheran. Superintendent Stresow charged him, for this reason, with being heterodox. Prince Ludwig tried to heal the difficulty by ordering both the Heidelberg catechism and Ratich's reading manual to be used in the schools; but this satisfied neither party.

In a report which Stresow and some other men of eminence made upon Ratich's school, by the order of the prince, it was remarked that the catechism and music were studied too little; that the discipline was bad; that the hours of recreation were too many; that the children were made to pass too quickly and abruptly from the letters to reading, without any intermediate study of syllables, and that they "wrote *vitiosissime*."

It is true that the results did not answer Ratich's great promises. He laid the blame, for various reasons, upon his patrons and colleagues; and the consequence was that Prince Ludwig imprisoned him on the sixth of October, 1619, and only released him in the middle of the year 1620, on his signing a declaration in which he says that he "had claimed and promised more than he knew or could bring to pass.‡

Afterward, in 1620, Ratich went to Magdeburg, where he was well received by the magistrates, but in 1622 he got into a quarrel with Rector Evenius. Princess Anna Sophie, who had married Count Gunther von Schwarzburg, now invited him to Rudolstadt, where she

* J. C. 35.

† Ib. 42.

‡ Ib. 15-19.

§ Ib. 7, 19, 20.

studied Hebrew with him. About this time many opponents came out against Ratich, and among others the well known Dr. Hoß von Hoßnegg, chief court chaplain at Dresden, who had been his strong partizan in 1614. In 1626, however, he wrote a long communication to the Countess Anna Sophie, opposing Ratich's views. "Your grace knows well," he writes, "that if one should give himself out for an architect, and especially for an uncommonly good architect, he would not be at once received as such, but that special, thorough, clear and demonstrative tests, would be made use of, before men would employ him for important buildings, or put them under his charge. But we, here at court, know of no such public, thorough proof, whatever, which the Herr Ratichius has given, proportionate to his claims, even in any small place; for the lack of which proof, people here will be the less willing to make any change in their system of teaching, and to adopt, instead of it, the Didactics of Ratich."^{*} The Dukes of Weimar and Gotha soon gave him up, but Countess Anna Sophie still adhered to him. She supported him at Kranichfeld and Erfurt, and recommended him to Chancellor Oxenstiern, who caused an examination to be made of his system. Doctors Hieronymus Brückner, Johann Matthæus Meyfart and Stephan Ziegler, made a favorable report upon it to the Chancellor, March 10, 1634.[†]

This report discussed, 1. The purpose and design of the plan.

2. The mode of teaching.

3. The promises made. The reporters first take up Ratich's arguments against the existing mode of instruction; as, that it is not really Christian; that the scholars have to learn too many things at the same time, &c.[‡] They then describe Ratich's method; and, lastly, consider his requirements, as, a regular appointment, the chief directorship of the work, good fellow-laborers, &c.

Comenius, who met the Chancellor in Sweden, in 1642, relates the result of his negotiations with him. "When I heard," said Oxenstiern, "that Ratich had a new method, I could not be easy until I had myself seen the man; but instead of conversation, he sent me a thick quarto. I accomplished this wearisome labor, and after I had read the whole book through, I found he had, it is true, not ill displayed the faults of our schools; but that his remedies did not appear thorough."[§] A sensible opinion. Comenius himself applied to

^{*} Niemeyer B. p. 8. This letter is in the Duke's library at Gotha. Niemeyer gives other extracts from it. (D. 13.)

[†] Ib. A. p. 7.

[‡] Details further on.

[§] The Chancellor does not mention Meyfart's report.

Ratich by letter, in 1629, as he relates in another place, asking him earnestly and repeatedly, to give him an account of his new method. But Ratich gave him no answer.

It was in 1632 that he first obtained an account of it, in a letter from the excellent Georg Winkler, pastor in Goldberg. "What great hopes," wrote the latter, "were excited by Helwig and Jung's pompous report upon Ratich's method! But our good friend Ratich fell short of it, and will continue to fall short of it." Winkler then relates how Moser, teacher in the school at Goldberg, had eaten a meal with Ratich, in hopes, by this plan, to find out something about his method; but he learned but little. Ratich had declared that he would only sell his discoveries to a prince, at a dear rate, and upon the condition that the men of learning to whom he should communicate them should promise to conceal them. Winkler asks, "would Christ, the Apostles, and the Prophets, have done so?"

Ratich did not long survive his negotiation with Oxenstiern. He had suffered an attack of palsy in the tongue and right hand, in 1633; and he died in 1635, aged sixty-four.

We will now examine specimens of Ratich's method of teaching German and Latin, in order to show how he and his followers proceeded in instruction, and then consider his more important general principles of instruction and education. I commence with an account of a method of instruction, so as to be able more conveniently to refer to it for explaining principles.

I. RATICH'S INSTRUCTION IN LANGUAGE.

Instruction in language should begin in the sixth or seventh year, with learning the letters; since the letter is the simplest element of grammar. The teacher should show the pupil the form of the letter, drawing it slowly on the blackboard, and naming it at the same time, so that the scholar may learn the form and the name of the letter together. He is also to compare the letters with forms, as, for instance, O with a circle, C with a semicircle, X with a cross, &c.*

Ratich requires that the pupil should copy the letters at the same time, but Kromayer, his follower, on the contrary, only permits it when he can read them easily.

The teacher then proceeds to the making of syllables; writing the names of them, as before, at the same time.

After this, Ratich says, he is to select an author from whom the language can well be learned, and whose contents are chaste and interesting; as, some history, comedy, &c. The youngest scholars

* Ratich's "Methodus," 140.

must, however, have a manual of the rudiments, (*parvus libellus rudimentorum*.) while the older use the author himself. This author is Terence.

Here the Ratichians differ from Ratich in one direction, and Kromayer in another. The former direct that after the study of the letters, Terentius* should immediately be taken up. The latter, however, says: "The boys should first learn German well, before Latin or any other language is laid before them; for it is wrong for the boys to have any Latin material, such as Donatus, Latin verses, or the like, put before them, before they understand German well." He adds that many scholars learn Latin grammar without knowing German well; "that although they may not have learned it well in the lower classes, they are at once put into Latin. It is still worse when the children even at first, before they can read German, are taught to read in Latin A B C books. This is contrary to nature; for it is much easier to learn to read in the mother tongue, than in one strange or entirely unknown." German should therefore be taught in the German classes, and Latin be postponed to the Latin classes.

Kromayer's course of Latin instruction is briefly as follows. From their letters, the step to reading, is to be made as soon as possible. The teacher must first "read over by himself the whole book (of Genesis) to the end, reading each chapter twice over together; the scholars not reading at all, but only listening, looking on and following." When the book is gone through in this manner, the preceptor is to begin again at the beginning and read each chapter once, making the scholar read it over immediately after him, perhaps four lines at a time." The book is afterward to be read a third time, by the scholar alone.

After this Kromayer proceeds to teach German grammar to those who are afterward to study the ancient languages. "When any especially fine intellects are found," he writes, "such as the teacher recognizes as fit for study, and to be afterward put forward into other schools, after they have learned to read fluently, they are to be put into the German grammar, and thereby a good introduction made for them to the Latin grammar.

"The preceptor is to place these scholars together, and to teach them the German grammar; a chapter, or some other convenient part, at a time. The teacher is first to read it clearly, and explain it a little, where necessary, in other words; secondly, the scholars are

* "Praxis," 162. "*Alphabeto absoluto progreditur ad syllabas. Quo facto statim ad Autorem, qui in lingua latina est Terentius, fit transitus.*" Nothing is said by the Ratichians about teaching German; but we have seen that in Ratich's school at Kùthen, the three lower classes were German, and that Latin was first begun in the fourth.

to read it over after him, once, or ten times, if necessary; thirdly, as it has been well enough read, the pupil is to take up the first book of Moses, which he knows already; and the teacher is to show him the applications of that part of the grammar which was read, in the first chapter, in five, six, or even ten examples, reading the chapter until he comes to a point which is an instance of the rule in question. Here he pauses a little, and shows how the example agrees with the rule or precept in the grammar. As, for instance; if he is speaking of uninflected words; he will find an example of them in the very beginning of the first book of Moses, as he will also almost anywhere. "In the beginning God created the heavens and the earth," &c. "In" is a preposition. "And the earth was without form and void." "And" is a conjunction, &c. Again; if he is speaking of nouns and verbs,* "Beginning" is a substantive noun, of the masculine gender, singular number, &c. "Created" is an active verb, third person, imperfect, &c. He may then conjugate it to the third person singular, where he will show that this is the person used in the book, at that place. He is to go on with such applications, not only in the first book of Genesis, but through the remaining chapters.

This method of application depends chiefly upon this point: that the teacher only is to read, while the pupils pick out the examples; finding them themselves in the book, when any form in the declension or conjugation is required; so that it is necessary to keep a sharp eye upon the grammar, and to listen very quietly to the teacher's reading. When one part of the grammar has thus been applied, the teacher is to go on to another; read it, make the scholars read it after him, look out the examples in Genesis, show and apply them.

And in all this matter of the German grammar, it is to be observed, that it is not intended that an entirely complete knowledge of each part of the grammar, shall be required of the boys as they go over it. Indeed, this could not be required either of the teacher or the pupils.

We know very well, it is true, that improvement in grammar must consist of an always increasing amount of observation and practice; but it is enough for the boys to get a reasonable knowledge in their own mother tongue of the *secundas notiones*,—the grammatical terms—such as number, case, declension, conjugation, noun, verb, &c., before they take up Latin, since they will then have more than half learned the meaning of these terms in their own language. It would be much easier for one who had already learned the grammar of Latin, to understand the parts of speech, number, tense, person, verb,

* Ratich uses German words for all the grammatical technicals. Niemeyer, D. 39.

noun, &c., in Hebrew, or any other foreign language, than for one who should first learn his grammar in the Hebrew, or other entirely unknown language, without knowing what grammar really is, nor what are the true notions and actualities of nouns, verbs, number, tense, mode, and case. It can be easily understood that the case is the same with scholars who are set at once to learn Latin grammar in the unknown Latin language, before they really know what the ideas of grammar itself and its different notions are.

It should be remembered, however, that it is not to be expected that one grammar should be of assistance in learning another, by having all the words in one of exactly the same gender, conjugation, and declension, as they are in another. This is impossible in most languages. It is sufficient, that, in general, one grammar helps in learning another; that, in general, if I have already become acquainted with the notions and characters of gender, case, declension, conjugation, &c., they would no longer be so difficult and entirely unknown, when they should come up again in the Latin, or some other grammar, but much easier. And this opinion, is, by no means, of little importance. It is upon it that we base our principle that the German grammar should be learned before the Latin."

Ratich's directions for teaching Latin, agree, throughout, with those of Kromayer, in whose own words I have given them.*

"The Latin grammar should not be learned before the author, but after, and in the author. The books which we use in the Latin class, are, accordingly, these: 1. The author, as, for instance, Terentius, whom we have had printed for this special purpose. 2. The Latin grammar, which we have also had arranged expressly for this purpose. 3. The Latin evangelists. *Item*, the Latin catechism, and the Theological Commonplaces; and, moreover, for the higher classes, the other Latin authors, as Cicero, Virgilius, &c.

Terentius, with whom we begin, should be first understood, as to his substance and meaning, as far as possible, in German.

For just as a man can learn Hebrew, for example, in the first book of Moses, which he already understands in German, much more easily than in one of the difficult Prophets, which is in great part unknown, or than in an entirely unknown Rabbinical book; in like manner is it certain that the scholar will learn the Latin language also much more easily, if he is already acquainted with the sense and manner of his author, as, Terence, for example, in German, than if he should

* I purposely give the full original, instead of extracts; as its diffuse form entirely coincides with its wearisome contents, and will give the reader a just idea of the method of instruction of Ratich, and his followers, and a lively sympathy with teachers and scholars under it.

have no knowledge, whatever, of it. It is much to be wished, that some one would print a close translation of Terence, in good German;* for then each boy might be made to read over each comedy twice or thrice, before taking it up in the Latin.

In the meanwhile, however, the preceptor must make up for the deficiency by his own industry. Before each comedy he must give the whole substance of it, before each act its whole contents, and before each scene the full meaning, in German, orally, very clearly and intelligibly, once or twice, or must make them say them over after him, just as if they had a German Terence in their hands.

After this he is to begin to translate the Latin *de verbo ad verbum*; taking perhaps three pages at once, and translating it word for word, twice at one lesson. The signification must be given most strictly after the letter of that radical meaning of the word, as far as possible, which is in use, whether it agrees with the sense or not. As for example in the prologue to the *Andriae*: *Poeta* the poet, *cum* when, *primum* first, *animum* the mind, *ad* to, *scribendum* writing, *adpulit* he has applied, *id* it, *sibi* to himself, *negotii* of business, *credidit* he believed, *solum* alone, *dari* to be given, *populo* to the people, *ut* in order that, *placerent* they might be pleased, *quas* which, *fecisset* he had made, *fabulas* the narratives, etc. And the exposition must not vary, but each word must be always translated alike, as often as it appears, throughout the book.

He must read each portion twice at a lesson, immediately over, and must say not a word between; and the boys are to remain entirely still, and only to listen and follow in the book. Thus the preceptor is to go from lesson to lesson, letting no one recite, but translating

* Gervinus (History of poetical national literature, 3, 76) says: "People could not be satisfied with translating Terence. In 1620, the Society for usefulness, (*Fruchtbringende Gesellschaft*.) published the whole of Terence, at Köthen, in German and Latin. The whole of it was also translated in 1620, by Michael Meister and at Halle, in 1624, by David Hüscher and Math. Schenk, in 1626 anonymously, (published at Weimar, by Joh. Miechner,) and in 1627 by Johann Rhenius; which last translation passed through two editions in the 17th century." All these translations ought to be attributed to Ratich's method. The first certainly was; for its title is, "*Publii Terentii six comedies. For teaching. Köthen 1620.*" (Niemeyer C. 22.) The Society for usefulness, which edited this translation, was also established by Prince Ludwig von Anhalt, Ratich's protector. David Hüscher, a co-author of the translation of 1624, was rector of St. Anne's schools at Augsburg. He was sent, with two others, in 1614, to Ratich to Frankfurt-on-the-Maine, to become acquainted with his method. They reported that Ratich had so far explained his invention to them, that they were satisfied and pleased with it. He was, in consequence, invited to Augsburg, to reform the Gymnasium there. I discovered in a certain catalogue of books, "*Terentii six comedies. translated into the German tongue. Weimar, 1626:*" which is, perhaps, the translation mentioned by Gervinus, and by Kromayer too. Johann Rhenius published, in 1626, three pedagogical treatises, which he had received from his excellent friend (*optimi amici*) Ratich. As Terence occupied a prominent place in these treatises, it was, perhaps, by this means, that Rhenius was influenced, during the next year, 1627, to print a translation of it.

the whole of Terentius alone, each portion twice. This will occupy a few weeks.

After this the preceptor is to begin Terentius again from the beginning, as before; translating word for word; but so that the preceptor shall translate his three pages only for the first time, during the first half lesson; and for the other time, immediately after, for the second half of the lesson, the boys are to translate, always in their order, each four or five lines; and when they fail, he must immediately help them; and the others are to listen earnestly in the meanwhile, and attend.

When, in this way, Terentius had again been brought to an end, he must begin at the beginning a third time; and now the boys alone are to translate it, each portion twice at a lesson; and the preceptor is only to listen, and to assist them when they fail.

When they have thus gone through their author for the third time, the preceptor is to cause them to take the grammar in their hands, and here also, he must go over all the ground before them, as follows:

He is to explain to them the substance of the whole grammar: how it speaks of the treatment of single words according to the etymology, and then of the right connection of them, according to the rules of syntax, so that they shall become complete propositions; and he is to remind them of what they have already learned in the German grammar, and to encourage them by showing that it will be almost all of it easy, and the work trifling and not hard, if they will only silently and earnestly listen and observe.

After this he is to take a certain chapter or part, read the rule or definition, and immediately repeat the interpretation of it according to the sense, that is, the right German meaning, always reminding them of what they have been over in the German grammar. Thus he is to go on to the end of the part he has taken, and to repeat his explanation a second time; and for the third time he is to read the Latin contents of the same part, but without the German, and is to let the boys explain it after him perhaps three or four times, each a certain part; and after that, at the same lesson, they should read the portion over ten times or more, clearly and distinctly, but without translation.

Afterward, in this or the following lesson, the preceptor must apply this lesson without the grammar, in the author, Terentius, in this way; he is to begin Terentius again at the beginning for the fourth time, and now he is to make the boys all the time keep both books in their hands, for the application; namely, Terentius and the grammar. Then the preceptor is to translate again, word for word, until

an example occurs of the part of the grammar which has been read, and there he is to stop, and explain how this is an example of the rule which has been studied, and to repeat the translation of the Latin words, and to read over the rule or precept, and immediately to show how the example comes under it; and the boys must all the time point out with their fingers the examples in the author, as he names them, and immediately afterward turn their eyes and their fingers to the grammar, to the rule which has been explained there as that under which the example comes.

And as soon as the preceptor has made application to one example, he must cause the boys to do the same with four or six examples of the same kind, until the whole class has often enough heard and observed what are such examples in the text, how they stand in the author, and how they relate to the grammar; and until they well understand the rule by means of such examples. If the preceptor were to proceed at once, the boys would not so soon have learned to pick out the examples in the author, and before they had learned to perceive and understand them, the preceptor would be far advanced in the lesson.

But when, as above shown, such examples have been picked out five or six times by the boys, then the preceptor is to proceed and select further examples in the text. But he must always translate along in the author until another example occurs, and not let any precept or rule pass until it has been explained by some twenty examples; and must make the boys repeat such examples, especially at first, and until they have become a little used to the application in the author, some four or six times; and when they have become used to it, at least two or three times.

And in this course of study it is not necessary to say how far the pupil shall go at a lesson, either in the grammar or in the author; for when one lesson is not sufficient, another may be taken on the same.

When one precept has been explained as above, and applied in the author, the preceptor is to go on in the grammar, take another part of it, explain it, read it, cause it to be explained after him, and to be applied to the author.

And it is to be observed, that only the most important and principal rules of the grammar are, for the most part, to be practiced; but if there are some special portions or exception, of which not many instances occur in the author, then those are to be more quickly passed over, and the drill upon them is to be postponed until after the grammar has been gone through with.

It is to be remarked also, that we practice *triplicem analysin* or

applicationem; 1, *particularem*; 2, *universalem*; 3, *universalissimam*. In the particular analysis, we make application only to examples which come under the single precept or rule of the grammar which we have been over, and pass over the remaining words of the author with only a translation. But in the universal analysis, which follows after the pupils have gone through the etymology in the grammar by portions, we make applications to each word, as they stand one after another in the author, whether it be *vox flexibilis vel inflexibilis, conjunctio vel praepositio, nomen vel verbum*, etc.

In like manner is the proceeding to be with the syntax, after it has been gone through with by portions; that is, without regard to the place in the author where the class is, all instructions are to be used for application *universaliter*, period after period, as they stand in the author, and brought under their rules in the syntax; until at last comes the third or *universalissimam analysis*, in which all the grammar is applied at once; first etymology, and then syntax being applied to each period of the author; until the whole author has been analyzed and explained *grammaticæ*.

In the beginning the teacher must go slowly, and make the application to one word ten or twenty times, *item* must cause each rule to be recited over ten times or more. But he need no longer go so slowly, and may proceed more rapidly, when he sees that the boys both understand the principal precepts, and from their repetition of them know them by heart; then it is enough to make a single application with one word, or to pass it over entirely and only to have those attended to and carefully recited, which occur more seldom, or are for some reason more difficult; at the last the preceptor must push on with speed, only attending to such examples as have some special interest.

And especially must the teacher begin, this time, when any particular phrases occur, to inflect them thoroughly in tenses and persons, although not always in their regular order; the preceptor first repeating such phrases over to the boys, several times, and inflecting them, and causing them to select them for themselves and inflect them, when they have heard him sufficiently.

As for example, Heaut. 1, 1. *Ego vesperi domum revertor*, I return home at evening; *tu vesperi domum reverteris*, thou returnest home at evening; *vos vesperi domum revertimini*, ye return home at evening; *tu vesperi domum revertebaris*, thou didst return home at evening; *nos vesperi domum revertēbamur*, we returned home at evening; *illi vesperi domum revertentur*, *nos vesperi domum revertamur, reversieramus*, etc.

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It is to be remembered that only the more important points in the grammar are usually to be studied; as, in etymology, the declension, *item* the *Genus nominum*,* *item* the *Conjugationes verborum*; in syntax, barely one rule more than ten: as 1. *Adjectivum et Substantivum*, etc. 2. *Substantivum cum substantivo*. 3. *Dativos adsciscunt*, etc. 4. *Ablativo casu efferuntur*, etc. 5. *Relativum cum antecedente*, etc. 6. *Nominativus praecedat*, etc. 7. *Activa verba omnia*. 8. *Ablativus instrumenti*, etc. 9. *Quodlibet verbum admittit dativum*, etc. 10. *Infinitivi adduntur*, etc. 11. *Accusativus proprius casus*, etc.; *item* about *Praepositionibus*.

These portions are chiefly to be practiced; with the rest, the boys must not be too soon troubled, delayed or discouraged, since they can learn them just as well afterward, when they have come to the making of sentences, when they can well and quickly learn them in small portions at a time, thus being able to observe for themselves some *fructum studii grammatici*, not without pleasure and good hopes for the future. When they have come as far as this, then the preceptor may take up the remaining more difficult parts, bringing them forward as supplementary, and explain them one after another, reading them over often, *item* making them well and clearly understood by a repeated application of many examples.

When the grammar, with its more important parts, has thus been brought to an end, then the preceptor is to take up the author once more and translate him according to the sense, each scene a couple of times, and then to go on immediately, letting the boys listen only, until he observes that by thus listening they have acquired a good habit in it; and then he may cause them to translate for themselves, helping them at once when they fail.

When the scholars understand the author *ad sensum*, then may follow exercises in style; or, as they are called, argument making, that is:

The preceptor shall first for some four weeks himself orally make sentences before the scholars, all in imitation of Terentius, from the beginning again; shall bid the boys attend closely, and repeat to them the German sentence, *ad imitationem mutatis personis item temporibus*, etc. Immediately after this he is to proceed and give another, as long as the lesson lasts, and the boys are only to listen and observe the imitation in Terentius. Such sentences should be at first only a line long, or should include only one comma; but may afterward be longer and longer, of two or three commas, etc. At last they may be of two or three whole periods; and then he may carefully explain to them the *particulas connexionem*.

* These are the beginnings of rules from the syntax of Melancthon's Latin grammar.

When this oral sentence-making has been practiced for a while, then first, and not before, may he proceed to written sentences, and these must for the most part, especially in the beginning, for a sufficient time, be only for imitation. And when the sentence has been dictated he is to cause one or another scholar to read it aloud, and to observe whether they have all heard and written correctly, and made the right distinctions. Afterward comes correction; and this to be not silent, but aloud; not with a pen in each book, (for the boys can seldom read and correctly understand such blots,) but aloud. And it is sufficient, when the boys are many, if one sentence is corrected for some four of them, only it must be done aloud, that the others may have advantage of it.

When the boys have come so far, he may begin to talk Latin with them; and they may be put forward *ex classe grammaticae Terentiana*, into a higher school or class, as *Ciceronianam*, *Virgilianam*, etc."

In 1573 appeared a school-plan* for all the Saxon duchies, forty-six years before Kromayer's School System. This plan was in many respects diametrically opposed to the latter. Grammar was put first in it, learning by rote, and private study next, etc. It is, therefore, not to be wondered at, that Ratich's new method gave great offense in Weimar, so that Kromayer, at the end of his report, was obliged to add that this new organization for schools did not contemplate the destruction of religion.† "Especially," he continues, "has this excellent school system been opposed by ill-disposed or ignorant persons, as if there was concealed behind it nothing else than a corruption of pure learning, and apostacy from the true Lutheran religion. Such a charge is entirely baseless and false." He refers in addition, to the fact that "in our schools the Book of Concordance itself, which makes the Lutherans differ from the Calvinists even more than from the Papists, is used continually, in German and Latin, in a manual prepared for the purpose."

I quote so much from Kromayer's report to show that Ratich and his followers had already gone far enough in the road of Hamilton and Jacotot, and had even pushed the method to caricature. For example, Terence, according to Kromayer's directions, would be read three times in German, and more than six times in Latin. The German translation had to be as literal as possible, for the purpose; and if this were so, what justification had they, for causing such matter to be repeatedly read by the young?

* Method for managing the trivial schools proposed at the visitation of churches and schools under the dukedom of the younger princes of Saxony. Jena, 1573.

† Similar complaints, but with more reason, were made against Rousseau, Basedow, etc., at a later period.

From the explanations of Ratich and the Ratichians, of the method of reading Terence with the boys, I shall further only extract a couple of strange observations.

The teacher, says Ratich, must first read his author very slowly, and syllable-wise, and the scholars are to follow in silence, reading after him in their books. The scholars are not to read the lessons over by themselves.* After the lesson, say the Ratichians,† the books are to be left in school. Only the more advanced scholars are to be admitted to repetition. "The understanding acts of itself, and learns naturally," he says in the Articles,‡ "but only when the teacher is present so that he may teach it first. If the pupil is himself wise and intelligent enough to know how he ought to learn and be taught, then he needs no teacher." Yet before the scholar has heard any thing of Latin grammar, the teacher is to read with him a portion every day, and thus from Monday to Friday, to go over a space which is to be read again on Saturday. Thus the six comedies of Terence were to be read within six weeks.§

We shall see further on why the author is to be read before the grammar is studied.

Having thus explained one instance of the methods of instruction of Ratich and his followers, I proceed to the

II. GENERAL PRINCIPLES

Of this methodologist, as they appear in the "Articles" and "Aphorisms," subjoined to the "Praxis."

1. "Every thing in its order; or, the course of nature.¶ Since nature uses a peculiar method, proper to herself, with which the understanding of men is in a certain connection, regard must be had to it, also, in the art of teaching; for all unnatural and violent or forcible teaching and learning is harmful, and weakens nature."

But, had Ratich and his school found the true order of nature? Had they, for instance, in teaching Latin? Were they not forced, in discipline, to adopt methods of compulsion and beating, quite opposed to the sacred motto of "*naturam sequi*?"

2. "Only one thing at a time.¶¶ Nothing is a greater hindrance to the understanding than to undertake to learn many things together and at once. It is as if one should undertake to cook pap, fruit,

* Methodus, 146. "Ab omni præceptore omnis privata repetitio discipulis plane interdicta est.

† Praxis, 166.

‡ Ib. p. 129.

§ Ib. p. 164. "Thus a comedy will be finished in a week, at one act a day. This shows how much promptness the teacher needs, to finish a whole act in an hour." (Very true!)

¶ "until, in six weeks, all Terence will have been read and explained. And up to this time the pupil has heard nothing of Latin grammar."

¶ Ib. pp. 179, 176.

¶¶ Ib. pp. 179, 176.

meat, milk and fish, in the same kettle. But things should be taken up orderly, one after another, and one thoroughly dealt with before proceeding to the next. In each language, one author should be studied until the language is well learned. When he is well learned; and, as it were, well swallowed down, others may be read. One should undertake nothing new until that which preceded it has been learned thoroughly and sufficiently for all purposes."

Is this actually according to the "course of nature?" Is it natural, if one has lived eight months on pap or on fish alone, just as Ratich's scholars were kept at Terence eight months, and more too, not to wish anything else to eat? Is not a variety of reading material like that in the valuable reading books of Jacobs, much more agreeable to the "course of nature?" Just as we do not eat one thing altogether; but, for example, bread with meat; just so it is the problem of the teacher, not to lay before the scholars an everlasting and wearisome monotony. And, as skilful cooks endeavor to find out what viands go together, so as to obtain at once a good flavor and easy digestion, just so must the skilful pedagogue, even within the same term, teach the same scholars different things, such as may serve as supplements to each other, by their variety may keep the scholar fresh and unsatisfied, and at the same time may healthily nourish his mind.* And the rule, "one should undertake nothing new until that which precedes has been thoroughly learned," needs this addition: in proportion to the measure of ability of each scholar.

3. "Each thing should be often repeated. It is incredible, what may be accomplished by the frequent repetition of one thing. For this reason it is that only one and the same material is to be handled, in all lessons, both forenoon and afternoon. For what is often repeated, will become more deeply and correctly impressed upon the understanding. But if one goes over one thing once, and immediately goes on to another, and so to many things, one after another, none of them will be learned well, and the understanding will be confused, overstrained and weakened."

This is like the previous principle; and like it suspicious, if moderation be not observed in the practice of it.

4. "Every thing first in the mother tongue. For the scholar must do his thinking about what he has to learn, in the mother tongue; and he ought not to have any further trouble about the language of it." "There is always this advantage, that if knowledge useful and

* A contemporary had already said, "variety of lessons may be of two kinds: one confused, and the other orderly; this last is not hurtful, since it is directed to a single knowledge." Grauerus, 12.

necessary in common life, were put into German and learned in it, every one, whatever his business, could acquire a much better knowledge of it, because he could guide himself and express himself better in all matters connected with it. How important this would be in religion and government, and in human life generally, will easily be imagined, if we reflect what a miserable condition of ignorance and inexperience is most usual."

"After the mother tongue, then the other languages."*

The importance of this article is clear. It aims at the restoration of the mother tongue to its proper rights, and at the removal of the sharp distinction between the Latin learned and the unlatinized laity, and of the demand that the latter shall be educated, and that the mother tongue be the vehicle of their education.

What germs of good, but, from after abuses, of evil too!

5. "Every thing without compulsion."†

a. "Boys can not be whipped into learning or wishing to learn. By compulsion and blows youth are disgusted with their studies, so that study becomes hateful to them. Moreover, this is contrary to nature. For boys are accustomed to be flogged for not remembering what has been taught them; but if you had taught them rightly they would have remembered it, and you would not have needed the blows. And that they should atone for your errors, because you did not use the right method of teaching, is too great an injustice. Also, the human understanding is so made that it must have pleasure in learning what it is to remember; and this pleasure you destroy with your anger and blows. But as to what belongs to morals, *mores*, and virtue, there is a different rule. 'Foolishness is bound up in the heart of a child, but the rod of correction will drive it far from him,' as Solomon says.

b. The pupil should not be frightened at the teacher, but should hold him in love and reverence. This follows of itself from the foregoing. For if the teacher rightly exercises his office, it will not fail but that the boy shall take up a love for him and for his studies.

‡All the work comes upon the teacher. For he has to read and explain, and in the mother tongue too; yet this is much easier than the work formerly usual in the schools. For he has not to plague himself with hearing, examining and whipping, but conducts his lessons in a decent way, and is sure that he will gather fruit from them; for this can not fail him if he only does rightly the office of teacher, and pursues the proper method.

* Frazis, p. 182.

† P. 183.

‡ P. 196.

*The teacher must do nothing but teach. To maintain discipline belongs to the school officials, * * * * so that the pupil can not contract a repugnance to his teacher, but may love him more and more; which has much efficiency in learning."

These doctrines again are forerunners of the later pedagogy. If the children learn nothing, the teacher must take all the blame; for according to Ratich's method they *must* make progress, without any doubt at all; a Mercury can be carved out of any block. If the earlier pedagogy was hard-hearted and Orbilian, here there appeared a tendency diametrically opposite; a fear of losing the children's love, even by the conscientious enforcement of justice.† To make up for this, it is not the teacher, but the school officer, who is to administer punishment—as the Jesuits used to inflict bodily punishment not by a Jesuit, but by some one not a member of the order.

6. "Nothing must be learned by rote.‡ Reason: such is the indication of nature; otherwise violence is done to the understanding; and accordingly, experience shows us that any one who applies himself much to learning by rote, loses much in understanding and intellectual keenness. For if the understanding is occupied with the words, it has not room rightly to consider the things. It is unnecessary, too, and can be accomplished by better means; that is, when a thing has been well impressed upon the mind by frequent repetition, the memory of it will follow of itself without any pains."§

Here is an indication of the origin and tendency of the method. Earlier pedagogues base every thing upon learning by rote, without regard to the understanding of what they learned; but now the understanding is to be substituted for the memory. Ratich's school had as little regard as many of the later pedagogues, for the intimate connection between imagination and the memory, by which the former grasps the images which the latter retains and either purposely or arbitrarily reproduces.]

* Praxis, p. 200. The Praxis recommends the same, p. 167. "All should be done with judicious words and a countenance pleasant, yet grave; not with blows and harshness. If any case demands severe discipline, it should be put into the hands of the school authorities.

† We have observed above that the complaint was made in Köthen, that Ratich's schools were deficient in discipline.

‡ P. 185. The Praxis, p. 169, says, "Examine your scholars, whether they are ready in the conjugations and declensions, but always from the book, and not from memory; neither must the pupil be allowed to recite the inflections from memory."(!)

§ "For the real memory of an object depends immediately upon the knowledge of it." Methodus, 146. "The proceeding should be from the intellect to the memory; and never the contrary." Praxis, 164. "Nature has been constrained in this; that the boys have been made to learn by rote, and entirely by themselves, without the aid of the preceptor, what they do not understand." Gräber, 29. He also says, "The *localis memoria* is entirely forbidden; that is, remembering any thing by means of certain figures set in a certain order and so retained."

! P. 186.

Connected with this rule is another one, that the children are to have their hours of recreation; indeed that no two lessons are to come immediately together. Chiefly because "this method of teaching depends upon reading, and the hearing becomes wearied more easily than the other senses;" and because "each scholar must listen and remain silent."^{*} During the lesson he must not speak nor ask questions, in order not to disturb his fellow scholars, and because the lesson can not otherwise be finished in time. If he has any thing to ask, he must ask it after the lesson.

That such a continued silent listening to reading was a most unnatural constraint upon the boys, is indirectly here confessed by the Ratichians themselves in recognizing this fatigue. Comenius, who gives us a short description of Ratich's method,[†] mentions, that if the scholars are made to observe a Pythagorean silence, the teacher must labor in vain, for all power of attention is destroyed in the former.

7. "Mutual conformity in all things.[‡]

"In all languages, arts, and sciences, there must be a conformity, both as to the method of teaching, books used, and precepts given, as far as possible. The German grammar, for instance, must agree with the Hebrew and the Greek, as far as the idioms of the languages will permit. For this is a valuable help to the understanding, * * and gives perspicacity, when one sees how one language agrees with others and differs from them."

This points toward a general grammar, by teaching that the grammar of each language is to be divided into two portions, the universal and the particular. This is certainly right in part. In learning a new language, we very soon distinguish its agreements with, and differences from, the mother tongue.

8. § "First a thing by itself, and afterward the explanation of the thing.

No rule can be given before the material for it—the author or the language—has been given. This appears entirely absurd, but experience shows that it is entirely true. For what can one understand in any language, who has read nothing in any author of it, though he be all stuffed full of rules? He must at last come to this, that either in one author or in many, one after another, and with frequent repetition, he learns to understand the rules and make them useful.

^{*} P. 177. "In the disciple a Pythagorean silence." P. 176.

[†] Opp. did. 2, 80, 100. "This maxim imposes upon the teacher an asinine, useless, vexatious labor." "A human being is not a mere passive log from which you are to carve out a statue; it is a living figure, forming, reforming, deforming itself."

[‡] P. 187.

§ P. 188, etc.

What need, therefore, had he to plague himself in vain beforehand with the rules? Rules without material confuse the mind. Let any one remember for himself whether all his life long he has found in his reading all the examples which he was obliged to learn with great pains in the grammar. As, for instance, the patronymics; how they martyr the poor boys, and yet are seldom used; therefore it is an absurd thing that the grammar should first be beaten into them and that they should learn the language for the first time afterward. Get your corn before you trouble yourself about a sack. Get money before you buy a purse to put it in. Rules are not of use for a preparation, nor for a guide; but for the fixation of what has been learned. Whatever may have been the other uses of rules, nobody can remember that they gave him any help at the beginning, and prepared him to acquire the language more rapidly. Practice and experience teach us that any such speculation is empty."

"A basis of material must have been laid in the mind, before the rules can be applied to it." To the observation that in the grammar the rules are furnished with examples, Ratich answers, that, notwithstanding, the rules are useless; because they are insufficiently scraped together out of the most various authors, and are uninteresting. And in the "Articles" he says: "All sorts of examples come together from all sorts of authors, like mixed fodder in a manger; but no such means, with no connection within itself, can lay a good foundation and lead into the peculiarities of a language."*

These are the grounds upon which Ratich and his followers require the reading of some select author, and that the grammar shall be developed out of that author. At the first it may seem strange that Ratich should cite here the instance of geometry. Oral instruction, he says, would be of little use in this study, if the teacher should not display before his scholars some actual body or drawing on the black-board, an obtuse or acute angle, a circle, etc. But this illustration will be found, upon nearer examination, quite correct. He expresses himself entirely in agreement with our eighth "Article," thus, "that it is unnatural to occupy oneself with the accidentals of the thing before the thing itself."† This principle admits of a wide application in teaching, and is of great importance and truth, if it is not pushed to caricature.

9. "Every thing by experience, and investigation of parts."‡

The Latin aphorism is neater: *Per inductionem et experimentum omnia.*§

* p. 193.

† *Et omnino, accidentem rei prius quam rem ipsam quaerere potius absonum et absurdum esse videtur.* And in the Praxis, p. 175, *Ne modus rei ante rem.*

‡ p. 194.

§ p. 173.

No rule or idea is admissible which is not based upon new investigation and founded upon good proof, whether or not many, or all, have written, or believed so or so about it. For it is assured certainty which is needed, and this can by no means be founded upon authority. In this way there is no possibility of failure.* No authority is admissible, therefore, unless traced to its original reasons. Neither has established prescription any validity; for it gives no certainty.

The Latin phrase, "*Per inductionem et experimentum omnia*," shows almost conclusively that Bacon had had an influence upon Ratich. Whether or not the latter was in England when Bacon's first work appeared, "induction" was Bacon's shibboleth. Ratich's radicalism appears most strongly in this; and the motto of his school books, "*Vetustas cessit, ratio vicit*,"† proves the same—as if *vetustas* and *ratio* were opposite! In combating the prevailing servile regard for antiquity, however, he threw away the good with the bad. It is the past which must be the foundation of the future.

The later Methodians became infected with a stupid self-esteem and undervaluation of the ancients. In fact, however, the ancients had full authority, with both Ratich and the Ratichians; which is shown by the important part which Terence played in their schemes.

The above quoted report of Jungius and Helwig agrees with this statement. Jungius was born in 1587 at Lubeck, and was in turn professor of philosophy, mathematics, and medicine, at Giessen, Rostock, and Helmstadt; and died in 1657, at Hamburg, while rector of the gymnasium there, and professor of physics and logic. Among his numerous writings I find nothing except this report, of a pedagogical character.

With Helwig it is otherwise. He was born in 1581, at Sprendlingen, south of Frankfort-on-the-Main, and studied at Marburg, where he took the degree of master in 1599, in his eighteenth year. In 1605 he was established at Geissen, and was appointed professor of theology there in 1610. He died as early as 1617, in his thirty-sixth year, apparently in consequence of overwork. Helwig was an extraordinarily learned man. He spoke Hebrew as well as his mother tongue;‡ wrote grammars of Greek, Hebrew, Chaldean, and Syrian;

* *Non igitur auctoritas destituta rationibus valet, neque vetustas quicquam praecribit.* Praxis, 178.

† The same motto stands before his universal system in German: "prescription yields, reason overcomes, truth is recognized." (*Gewohnheit verschwind, Vernunft überwind, Wahrheit platztfind.*)

‡ Buxtorf wrote, "If I were with you, Helwig, I would lick the dust off your feet." Thus says Schuppius, Helwig's son-in-law.

a Hebrew and Greek school lexicon, and many other works. He was considered one of the most skillful teachers of languages of his day;* and had a new method for teaching languages easily, which brought upon him much derision and enmity. It was said of him that he "had contrived a funnel through which he could pour learning into the heads of youth as they pour wine into a cask in the autumn."† Helwig's report upon Ratich's method appeared only three years before his death. This learned man had adopted Ratich's views with great enthusiasm, and had developed them with remarkable skill.

I shall give the most important parts of this report. In the beginning he remarks, that Ratich has, "by diligent reflection and long practice, discovered a valuable method by which good arts and languages can be taught and studied more easily, quickly and correctly, than has been usual in the schools; and that he has been for thirteen years pursuing this Christian purpose."

According to Ratich's method it is possible, "if the proper books are provided first, as well for the old as well as the young, to teach or to learn any language, with pleasure and love, better than the mother tongue, at most in a year, and, with industry, in half a year, in three or four hours daily."‡

"Ratich's method is more practicable in arts and sciences, than in language; since arts and sciences are, by their nature, consistent with themselves, while the languages, on the contrary, by long use, have contracted many incorrectnesses."

Helwig seems to consider any departure from his general principles of language as much of an incorrectness as any maimed or distorted Latin word introduced into German.

We will now consider, continues Helwig, not only the knowledge of objects of instruction, but the gift of teaching likewise; but not this only, however.

"For nature," he says, "does much, it is true; but when art assists her, her work is much more certain and complete. Therefore it is necessary that there should be an especial art to which any one who desires to teach can adhere, so that he shall not teach by mere opinion and guess, nor by native instinct alone, but by the rules of his

* Bayle, *Helvicus*.

† Schuppius, "on schools," p. 120. His epitaph, on the contrary, calls him, "*Novas didacticas auctor et informator felicissimus*."

‡ Græwer's report, (p. 21,) says that Ratich's method does not dispense with labor, but that it requires less than heretofore. He says, "If one, in going from Jena to Leipzig, goes to Weida, then to Altenburg, then to Weissenfels, and thence to Leipzig, he will get there. But if another comes to him and says, 'I will show you a surer way, that is, by Naumburg and Weissenfels to Leipzig,' he does not mean that the traveler can go to Leipzig without labor, but only without superfluous and unnecessary labor."

art; just as he who would speak correctly, by the rules of grammar; and he who would sing correctly, by the rules of singing." This art of teaching applies, like that of logic, to all languages, arts and sciences; and is such a universal art of teaching as Ratich's. It discusses among other things, "how to distinguish among minds and gifts, so that the quicker may not be delayed, and that, on the contrary, those who are by nature not so quick, may not remain behind; how and in what order to arrange the exercises, how to assist the understanding, how to strengthen the memory, to sharpen the intellect, without violence and after the true course of nature. This art of teaching, no less than other arts, has its fixed basis and certain rules, founded not only upon the nature and understanding, the memory and the whole being of man, but also upon the peculiarities of languages, arts, and sciences; and it admits no means of teaching which are not deduced from sure grounds, and founded upon proof."

Helwig argues further against the usual unintelligent learning by rote, and translating into strange languages; "the requiring what has not been taught; the remembering what is not understood; the practicing what has not been learned." Ratich remedies this, relieves the boys from their misery, and puts the chief labor upon the teacher, who, however, finds it easier than before, "since, if he is not fully master of every thing connected with the language or art which he teaches, still, while he is teaching it to others, he himself, becomes ready, prompt, and thorough in it." Under the usual teaching, the result is uncertain, and every thing must be done by guess. "Most persons," he says, "choke themselves upon the bitter root, even to weariness, before they can get the least taste of the lovely fruit; that is, they have to torment and plague themselves, before they can see or know of the least use for their efforts."

Helwig proceeds to oppose the tyranny of the Latin; "as every such language directly injures the knowledge of the mother tongue, and as all arts and sciences may be easily and with advantage learned in the German language." Men, in general, have no need of Latin; "just as if Latin were the only measure of all the other arts and sciences, and the only means of attaining them."

Thus the new method leaves to the languages, arts, and sciences, their natural freedom. For," continues Helwig, "he who has abjured the tyranny of the Latin, may, according to his preferences or his necessities, learn one or another language, and use it, or devote himself entirely to one single art or science, and enrich it with new discoveries, as the Greeks, Hebrews, and others have done; who would never have done so much for posterity if they had been obliged to

martyr themselves with the grammar as many years as our own youth." If the monopolizing Latin is removed, Hebrew, Greek, and even Chakdee, Syriac, and Arabic, would be attended to.

The mother tongue, in particular, would not be neglected; as it has great excellencies, and ought to be correctly and systematically learned, as the ancient Greeks and Romans learned their native tongues. "Besides," says Helwig, "it is a clear truth that all arts and sciences, logic, ethics, political economy, mensuration, medicine, drawing, weighing, astronomy, architecture, fortification, and as many more as there are, can be more easily, conveniently, correctly, thoroughly, and successfully learned and taught in the German language, than in the Greek, Latin, or Arabic."

In order to introduce Ratich's method, grammars and compends must be prepared according to it, and "books of roots and words."

In conclusion, Helwig recommends the subject to princes and authorities, parents and teachers.

I can scarcely say how many of the principles of the modern Methodians, and of their views, appear in this report. Polemics against the usual method of instruction, against the tyranny of Latin, against mechanical learning by rote, and neglect of the understanding; and on the other hand, the promise of a new, easy, brief and certain method of instruction, by whose aid both scholar and teacher would be spared fatigue and doubt, which made but little requisition upon the teacher; the bringing forward of the understanding, and the low estimate of the memory; the equalizing of the Greek, Hebrew, &c., with the Latin; and especially the requisition that the mother tongue should be reinstated in its rights, and, still more, that it should be learned "correctly and systematically."

Grawer's report (of Jena) upon Ratich, is chiefly directed against the opponents of the new method. Objections had been heard, just as they are to-day, if any thing new is sought to be introduced in the school system. He says, "Do you ask, has nobody, up to this time, known how to teach youth languages correctly? Did our forefathers know nothing about it? Is the art now for the first time discovered?"* Grawer answers, "is it true that the method of instructing youth in languages, is so incapable of improvement? When music has risen to such a state of perfection, within the last eighty years, from so small a beginning, and yet have our forefathers left no improvements to be made in didactics?"

These questions were, however, occasioned by Ratich's too violent

attacks upon the accepted method of teaching, and his extravagant valuation of his own.

The second objection was, that if learning should be taught in the German language, it would become altogether too common, so that all without distinction, would be learned, and the rightful learned men would fall into disrespect. Learning, answers Grawer, is bound up with no language, although there is a belief, that, absolutely no one can be learned unless he understands Latin and Greek; and on the contrary, that if any one knows Latin and Greek, even if he knows nothing else besides, he is a very learned man.* We have heard something of the same kind in our own times.

Meyfart's report praises especially Ratich's orthodox Lutheranism, and says that he omits useless studies, and substitutes others.†

Ratich's life and labors are, in many respects, diametrically opposed to those of Johannes Sturm. The latter succeeded in every thing, because he labored in the spirit of the age, and, therefore, had the support of the age. He was only the head master among many who pursued the same design with him. Upon this purpose Sturm kept his eyes fixed clearly and steadily, and followed it resolutely and earnestly. On the contrary, many of Ratich's ideas were new and unintelligible, and even irritating to his contemporaries. He had sagacity enough to perceive the wants of the systems in vogue, but not enough to remedy them. He indicated many improvements, but only shadowed them forth in general principles. If he undertakes to work out any of his principles, to put them in practice in the school, he shows himself entirely confused and incompetent. Trusting in his principles, he promised what his practical incapacity would not permit him to perform; and thus, even with his well-wishers, he appeared a charlatan. This conflict between his ideal and his want of skill for the realization of it, made him unsuccessful, and in this he is a characteristic forerunner of the later Methodians, especially of Pestalozzi. Sturm, as a man skillful in his calling, known and recognized by his age, was, on the contrary, successful.

Ratich's works are in Latin, diffuse to tediousness, and pedantic in structure and style. Those of his followers are sometimes in German, but singularly interlarded with Latin words, showing that they were still under the "tyrannical dominion" of that language.

* Grawer, 63-66.

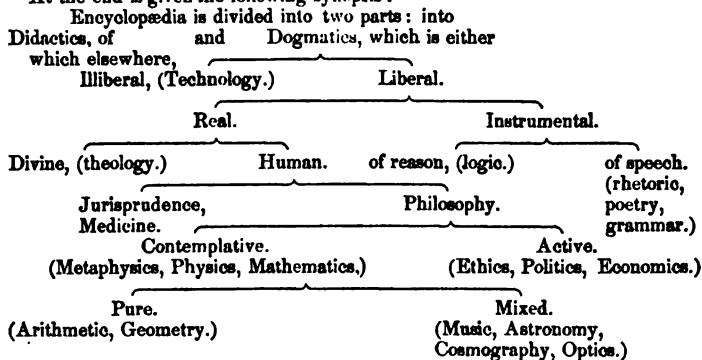
† I omit what Meyfart says about "*Instrumenta inservientia et dirigentia*," as obscure. "By means of the former," he says, "all can be learned which will enable one to attain to a knowledge of things and of language; and to the power of effective labor; and it therefore consisted, partly in knowing and partly in laboring." This sounds very much like Bacon. As *Instrumenta dirigentia*, he names, *eutactica*, *epistemonica*, *mnemonia*, *glossodidactica*, *praxeodidactica*, *noematicodidactica*, *organocodidactica*.

WORDS OF AND RELATING TO RATICH.

Ratich wrote many books, of which the following have come to my knowledge :

1. Universal Encyclopædia for Ratich's Didactics. Kothén, 1619. This is apparently the same with the *Allunterweisung nach der Lehrart Ratichii*, 1619. This Encyclopædia contains 13 pages of almost nothing except definitions of thirty-two literary studies. For example: "What is Encyclopædia? *Ans.* It is the course of rightly instructing the human mind in all things which can be known. How is it divided? *Ans.* Into dogmatics and didactics. What is dogmatics? *Ans.* It is the system of methodically explaining studies."

At the end is given the following synopsis :



2. Universal Grammar for Ratich's didactics : Kothén, 1619. (This appeared in Latin, German, Italian and French.) Like the Encyclopædia, it is in catechetical form, and has twenty pages, mostly of definitions. For example: "What is grammar? *Ans.* Grammar is the system instrumental for correct speech. How many things are to be considered, relating to correct speech? *Ans.* Two; essence, and attribute. What is the essence of correct speech? *Ans.* The essence of correct speech is its agreement with approved authors," etc.

To this catechism is added a tabulated view of the Latin conjugations and declensions. Both the Encyclopædia and the Grammar are little enough adapted to give a knowledge of Ratich's method.

3. The new method of instruction of Ratich and the Ratichians : by Johannes Rhenius. Leipzig, 1626. This collection includes:

1. W. Ratich's general introduction to the method of learning languages.
2. The Praxis, and description of the method, (in Latin,) which may serve as a model for other languages: by certain Ratichians.
3. Principles on which the Ratichian system is chiefly founded.

Rhenius says, in his preface, that he received these three treatises from the hand of his friend Ratich, and that two of them are by fellow-laborers of his at Augsburg. My respected friend Herr Rector Vömel of Frankfort, has been kind enough to communicate them to me; they are of great importance for understanding the peculiarities of Ratich's method. I have quoted from all of them.

Besides the manuals under the above heads 1 and 2, Ratich published the following books, mentioned by Jöcher, Schwarz and Massmann. I have not been able to obtain them, although I went for that purpose to Kothén, where they appeared.

New Didactics. 1619.

Rhetoric.

Physics.

Metaphysics.

Compendium of Latin Grammar.

Compendium of Logic. 1621.

Practice in Greek. 1620.

Little manual for beginners.

To each of these titles are added the words "for Ratich's Didactics."

4. Memorial presented to the German Electoral Diet of the Empire at Frank-

fort, 27th and 28th May, 1612. This memorial exists in manuscript in the city archives of Frankfort.

To these works of Ratich are to be added the following works expressing the opinions of his contemporaries:

5. Short report on the didactics, or art of teaching, of Wolfgang Ratich. In which he gives directions how the languages, arts and sciences may be learned more easily, quickly, correctly, certainly and completely, than has heretofore been the case. Written and published by Christopher Helwig, Doctor of Sacred Theology, and Joachim Jung, Philosopher; both professors at Gießen. Printed in the year 1614.

This report I received, as also the subsequent works, through my friend Professor Massmann, who reprinted them with valuable remarks, in part 1 of vol 7, for 1827, of Schwarz's Independent Year-book for German common schools.

6. Report on the didactics, or art of teaching, of Wolfgang Ratich. In which he gives directions how youth can learn languages very easily and quickly, without special constraint or wearisomeness. Composed and written by request, by several professors of the University of Jena, in which also various idle and useless questions are answered. Jena, 1714.

At the end of the report are the names of A. Grawer, Doctor and professor of the Holy Scriptures. Zacharias Bendel, Doctor of philosophy and medicine and public professor. Balthasar Gualtherus, professor of the Hebrew and Greek languages. M. Michael Wolfius, public professor of physics. I have quoted from Grawer.

7. Report on the new method, as it has been put in practice in the instruction of youth in the schools of the principality of Weimar; both in the German classes and in the classes in Latin grammar. Composed by Johannes Kromayer, court chaplain there, under the General Superintendency. Weimar: J. Weidner, 1619.

For this important work also I am obliged to the kindness of Herr Professor Massmann, who found them in the library at Munich.

8. Humble relation. On the system of instruction of Herr Wolfgang Ratich, put into the hands of his excellency the Chancellor and High Councilor of the Kingdom of Sweden, at Gross-Sommerda, March 15, 1634. Signed, at the conclusion, in these words: Signed, at Erfurt, March 10, 1634. Hieronymus Brückner, Doctor; Johannes Matthäus Meyfart; Stephanus Ziegler, Doctor of Sacred Theology.

This Relation, which was addressed to the Chancellor Oxenstiern, was printed by Herr Director Dr. Niemeyer in his examination programme, Halle, 1840; where he has also made valuable contributions to our knowledge of Ratich. The original Relation is preserved in the ducal library at Gotha. Among the contributions just referred to, is an abstract of one of Ratich's works, also found at Gotha, with the title: "The universal system of a Christian school, and how to establish and maintain it, in the true and natural faith, and in harmony of language, out of the Holy Divine writings, Nature and Language, according to the educational system of Ratich. Written by ——. *Ratichii symbolum, Gewohnheit verschwind, Vernunft überwind, Wahrheit platz-find.* Kranichfeld, 1632."

In three other programmes by Dr. Niemeyer, of the years 1841, 1842 and 1843, his interesting communications respecting Ratich are continued. I have quoted the programme of 1840 as "Niemeyer A," the second as "Niemeyer B," the third as "Niemeyer C," and the fourth as "Niemeyer D."

In programmes A and D, Dr. Niemeyer cites, among others, the following important works relative to Ratich:

Brief account of a celebrated teacher of the last century, Wolfgang Ratichius. By J. C. Förster: Halle. Printed by Michaelis, 1782.

Didactic accrued interest; or, certain meditations, and decrees of wise men cited under each; whence clearly appears what is to be thought of the method commonly called the Ratichian. By M. J. Blocius, of the school at Magdeburg, 1621.

Ordinance of the honorable Council of the City of Magdeburg, relative to the didactics of Herr Wolfgang Ratich. Magdeburg, 1641.

Hientzsch's Weekly Journal of the common schools. Vol. 1, Nos. 5 to 8.

Ratich's new and much needed method. Halle, 1615.

Vockerodt Programme, by Evenius. Gotha, 1724.

XVI. JOHN AMOS COMENIUS.

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

JOHANN AMOS COMENIUS was born at Comnia* in Moravia, in 1592. He early lost his parents, and his guardians so neglected him that he only began Latin in his seventeenth year. He says this neglect of his instruction, by which he suffered so much, made him early sympathize with others in the like condition.† He afterward studied in different places, especially at Herborn in the duchy of Nassau, where Alsted was his instructor. This man, a reformed theologian,‡ and an adherent of the Synod of Dordrecht, was the author of many theological, philosophical, and pedagogical works; he was also a Millenarian, and must have had an influence upon Comenius in the most different directions.§ Returning to his native country in 1614, Comenius became rector of the school at Prerau, and in 1618 preached at Fulneck,|| which, since 1480, had been the chief seat of the Bohemian Brethren, and of the Waldenses who had fled to them. Here he busied himself in overseeing the schools, and working upon school books; but lost his manuscripts when the Spaniards took Fulneck, in 1621.

In 1624 all the evangelical preachers in the Austrian dominions received an order to leave the country, by which Comenius lost his place. He then remained in the mountain country of Bohemia with Baron Sadowski von Slaupna, whose children a certain Stadianus instructed, for whom Comenius wrote a brief methodology. When afterward the decree was issued, ordering all who would not become Catholics to leave the country, there left Bohemia thirty thousand families, of whom five hundred were of noble blood.¶ Comenius, with his scattered flock, departed into Poland. Upon the range of mountains at the boundary, he paused, to look once more back to Moravia and Bohemia, fell, with his brethren, upon his knees, and prayed God, with many tears, that he would not suffer his word to be entirely destroyed out of those countries, but would preserve some seed of it there.

Comenius says that he places the beginning of his didactical studies

* Comnia is in Long. 36° 30', lat. 49°.

† Works on didactics, i. 442.

‡ Born 1588; died 1633, while Professor of theology and philosophy at Weissenberg in Transylvania.

§ Thus, Comenius says that he copied his arrangement of school classes from Alsted.

|| Didact. works, i. 3. Prerau is south from Olmütz; Fulneck about midway between Teschen and Olmütz.

¶ Raumer, Hist. of Europe, 3, 451.

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in the year 1627,* when he wrote the methodology above mentioned; but he might have gone back much further, namely, to the year 1614, in which appeared the report of the professors of Jena and Giessen, upon Ratich's method.† Under the influence of these reports he had, while pastor in Prerau, worked out a milder method of teaching Latin, and, for the purpose, had written a short grammar, which was printed at Prague in 1616. In the unhappy year 1627, he had reflected upon the means of helping the people, at the return of better times, by the erection of schools in which instruction should be given by good school books and clearer methods. In like manner, in the years of the French servitude, Fichte cast his eye upon Pestalozzi, with the hope that at Yverdun a new generation would grow up, for a future time of freedom in Germany. Comenius settled at Lissa in Bohemia, where he taught Latin, and in the year 1631 published his *Janua linguarum reserata*,‡ a new method of teaching languages, especially Latin. This book was the basis of his fame. He himself, in the dedication to his didactic works, says of it, "That happened which I could not have imagined; namely, that this childish book, (*puerile istud opusculum*,) was received with universal approbation by the learned world. This was shown by the number of men, of different nations, who wished me heartily success with my new discovery, and by the number of translations into foreign languages. For not only was the book translated into twelve European languages, since I have myself seen these translations,—that is, into Latin, Greek, Bohemian, Polish, German, Swedish, Dutch, English, French, Spanish, Italian, and Hungarian,—but into the Asiatic languages, Arabic, Turkish, and Persian, and even into the Mongolian, which is understood by all the East Indies."§

In Lissa he planned, as early as 1629, his *Didactica magna seu omnes omnia docendi artificium*. The great fame which his *Janua* had given him, brought him an invitation from the Swedish government, in 1638, to undertake the reformation of their schools. He did not accept it, but was induced by it to translate his *Didactica*, which had been written in German, into Latin. Some of his friends in England, to whom he had sent an extract from it, caused this to

* Didact. works, 1, 3.

† Besides him, Comenius names Campanella, Bacon, Rhenius, Joh. Valentin Andreä, &c., whose methods he had studied. He repeatedly applied to Ratich in vain by letter, during the year 1629, for information upon his method. Works, 2, 282. See Ratich.

‡ Didact. works, 1, 250.

§ "Mogolicam toti orientali Indiae familiarem." Bayle mentions the authors of several of these translations. The orientalist J. Golius, of Leyden, sent the *Janua* to his brother, P. Golius, in Aleppo, and the latter translated it into Arabic. It pleased the Mohammedans so much that they caused it to be translated into Turkish, Persian, and Mongolian. (?) J. Golius related this to Comenius in 1642, and adds, "*Vides Comeni quam feliciter tibi Janua tua ad gentes aperiat Januam*." Opp. did., 2, 268.

be printed. Upon receiving from England a like invitation, to undertake to reform their schools, he journeyed to London in 1641.* The matter was introduced into parliament; but the Irish disturbances, and the outbreaking of the civil wars, hindered his plans so much that he left England, and, upon an invitation from Ludwig de Geer, went to Sweden in 1642. In Stockholm he conversed with Chancellor Oxenstiern, and with Johannes Skyte, chancellor of the university of Upsala. "Oxenstiern, the Northern nobleman," says Comenius, "examined me more severely than any learned man ever did."† "I observed, in my youth," said the chancellor, "that the usual method of teaching was too harsh; but was unable to discern wherein the fault lay. When, afterward, my king, of glorious memory, sent me as ambassador to Germany, I spoke upon this subject with many persons. When I heard that Ratich had come out with a new method, I had no rest until I had seen the man himself; but, instead of a conversation, he gave me a thick quarto to read. I performed this tiresome work, and after I had read the whole book through, I found that he had well enough explained the defects of the schools; but the remedy which he proposed seemed to me not adequate. What you bring forward is better founded." I replied, "that in this direction I had done as much as was possible, and that now I must go forward to something else." To this Oxenstiern answered; "I know that you are contemplating a greater design, for I have read your *Prodromus Pansophiae*; we will speak of that tomorrow." "The next day," relates Comenius further, "Oxenstiern began to speak very plainly about the *Prodromus*, asking, to begin with, whether it would bear opposition?" Comenius answering in the affirmative, he began to attack the great hopes expressed in the *Prodromus*, with profound political reasoning, urging, among other things, that the Holy Scriptures prophecy much more of unhappiness than happiness, toward the end of the world. Still, he recommended Comenius to pursue his undertaking, but first to care for the needs of the schools, and to work out the easier way to learn Latin, which would be a step forward in the greater design which he was looking to. It seems as if the clear-headed, practical Oxenstiern desired to recall Comenius from his boundless undertaking, into one more restricted, but for that reason more sure of success.

The Swedish government now established Comenius in Elbing, to compose a work upon his method. With this arrangement his Eng-

* Opp. did. 2. introd. Congregatum interim Parlamentum, praesentiaque nostra cognita, jussit nos expectare.

†Ib. Comp. above, under W. Ratich, where was given an extract from this conversation with Oxenstiern.

lish friends were not pleased; they wished that others might be left to busy themselves in writing for boys, but that he should labor upon the greater work of the *Pansophia*. "*Quo morituro ruis? minoraque viribus audes?*" they wrote to him. He was pleased at this call to him to return into the "royal highway,"* and sent the English letters to Sweden, in sure hopes they would be persuaded by them. But the opposite happened; for he was urged much more on the part of the Swedes, to first finish his didactics. Things more excellent are to be preferred, it is true, they said. But what must be done first, should be first done. And men do not proceed from the greater to the less, but from the less to the greater.

So Comenius was obliged, whether he would or no, to return to making school books. After laboring four years he returned to Sweden in 1646. Three commissioners examined the work, and declared it proper for printing, when Comenius should have put the last touches to it. He returned to Elbing to do this, and thence, in 1648, to Lissa, where, in the same year, he brought out his work, the *Novissima linguarum methodus*.† It was in this year that the peace of Westphalia put an end to the frightful thirty years' war. In allusion to this, Comenius thus addresses himself to the princes, in the book: "Ye have destroyed many things, O ye mighty; now rebuild many! In this matter, imitate him who has given you the power of determining the fortunes of men; of him who destroys that he may build up; who roots up that he may plant."

In 1650, upon an invitation from Prince Ragozki, he went to Hungary and Transylvania, and remained there four years, during which time he organized a school at Patak.‡ Here Comenius wrote, among others, his second celebrated work, the *Orbis Pictus*. He was not, however, able to finish it in Hungary, for want of a skillful engraver on copper. For such a one he carried it to Michael Endter, the book-seller at Nuremberg, but the engraving delayed the publication of the book for three years more. In 1657 Comenius expressed the hope§ that it would appear during the next autumn. With what great approbation the work was received at its first appearance is shown, by the fact that within two years, in 1659, Endter had published the second enlarged edition.

In 1654 Comenius returned to Lissa, where he remained until 1656, in which year the Poles burnt the city, by which he lost his

* *Gavius ego hac regiam in viam revocatione.*

† *Didact. works, 2.* The preface was written at Elbing, 1648.

‡ Patak, i. e., river; also *Sáros Patak*: according to Comenius, (*Did. works, 3, 101.*) from its muddiness. It is east of Bodrog, in long. 29° east, lat. 49° north.

§ *Did. works, 3, 630.*

house, his books, and his manuscripts, the labor of many years. He fled into Silesia, thence to Brandenburg, and thence to Hamburg and Amsterdam. Here he remained until the end of his life, chiefly supported by wealthy merchants, whose children he instructed. He printed his *Opera Didactica* at Amsterdam, in 1657, at the expense of Lorenzo de Geer, son of Ludwig de Geer, mentioned above. He died Nov. 15th, 1671, in his eightieth year.

According to my promise, I have recorded especially the pedagogical labors of Comenius, although other writers* have made more prominent other facts in relation to this remarkable man, particularly his belief in several false prophets of the times, as Drabicius, Kottorius, and Poniatovia. Under the title *Lux in tenebris*, Comenius, in 1657, published their prophecies, which were chiefly directed against the Pope and the house of Austria. The Turks, they said, would make a successful invasion, take Vienna, and march thence, by way of Venice, against Rome, as against the new Babylon, and would destroy both cities. Afterward, it was hoped, Louis XIV., upon the destruction of the house of Austria, would become emperor, for the salvation of the world. The eyes of the prophets were also turned to Charles Gustavus of Sweden, Ragozki, and others; and they looked for the beginning of the reign of a thousand years, in 1672. Georg Müller says with much truth, in relation to Comenius' *Lux in tenebris*, "Is he so much to be blamed, when he saw truth and religious freedom, which lay so near his heart, everywhere put down by violence, for having insisted eagerly upon better hopes in the future, and, for having seen, in a lovely and hopeful dream, the time of salvation more nearly at hand than it was in the order of the providence of God?" Similar hopes, remarks Müller, were entertained by the most intelligent men of the day.

An important object, besides pedagogy and prophecy, which Comenius pursued with much eagerness, was the vain undertaking of reconciling the various Protestant confessions.

We may obtain an insight into the great piety and heartfelt love of this valuable man, as well as into the varied direction of his restless activity, from the Confession, which he wrote in his seventy-seventh year, in expectation of death; from which I quote the extract at the end of this account.

Comenius left many pedagogical works.† The *Opera Didactica* alone fills more than a thousand folio pages, and is a most rich treasure of acute and profound thoughts. I hope I may be able to give a brief character of the pedagogy of this distinguished man, as dis-

* See especially, Bayle, *voc.* Comenius.

† See the list of them, appendix II.

played in his writings, in such a manner as to present his most valuable and permanent principles, labors, and efforts, unconfused with his more transitory and accidental ideas and endeavors.

The first important work which Comenius wrote was his

I. DIDACTICA MAGNA.

He was, by no means, one of those pedagogues who take up one or another single subject of instruction, or who place all good in this or that method of teaching. He was, in the very best sense of the word, universal; and, notwithstanding this universality, he always strove after the most thorough foundation. Of this his *Didactica Magna*, the earliest and profoundest of his pedagogical works, is a proof. He had planned it as early as 1628, in his thirty-sixth year, in the full power of his manhood, and while unbroken by the misfortunes through which he afterward passed. He had pedagogical experience, while his views were not narrowed by the errors which afterward came upon him. He was sailing before a prosperous breeze, and gave his thoughts free course, without asking whether they were practicable. In truth, how many of them were impracticable in his time, which have since been well realized!

"Man," says Comenius in the *Didactica*, "lives a threefold life; vegetable, animal, and intellectual or spiritual. He has a threefold home; the mother's womb, earth, and heaven. By birth he has the second of these, and by death and resurrection, the third, which is eternal. As the child in his mother's womb is prepared for his earthly life, so is the soul, with the help of the body, prepared, in the earthly life, for eternity. Happy is he who brings into the world from his mother's womb, well formed limbs; a thousand times happier he, who at death takes a well trained soul from it.

Man is a reasoning creature, and the lord of all other creatures; the image of God; and, therefore, was his mind, in the beginning, directed toward knowledge, virtue, and piety. We can not declare ourselves incapable of these three by reason of the fall, without shameful ingratitude to the grace of God in Christ, through which we are born again.*

As made in the image of the all-knowing God, we strive after wisdom. The capacity of our minds is immeasurable.

The seeds of knowledge, virtue and religion, are not themselves, in the beginning, given to men, but they must be developed by prayer, study, and practice; by action does man first arrive at true existence.

* *Interiores nostras vires ex lapso primævo infirmatæ sunt sed non extinctæ.* Did. 56.

All men need instruction. Instruction must begin early. In youth God has made man unfit for civil and other duties, that he may have an opportunity for learning.

All children, rich or poor, high or low, boys or girls, must be instructed in school; in every thing God's image must be sought to be restored, and each must be prepared for his future calling. Each must learn every thing; each man is a microcosm. Not that each should learn every science, but that all should be so instructed that they may understand the basis, relation and purpose, of all the most important things relating to what they are, and are to become; so much is necessary for all who are to be actors, and not mere lookers on, in this world.*

We have no schools which fulfill their purpose. In many places they are entirely wanting; in others only the children of the rich are cared for; the methods of instruction are repulsive, wearisome and obscure; and morals are entirely neglected. No instruction is given about real things; fifteen or twenty years are spent upon Latin, and yet nothing is accomplished in it. "The best years of my own youth," says Comenius, "were wasted in useless school exercises. But how often since I have learned to know better, have I shed tears at the remembrance of lost hours; how often have I cried out in my grief, *O mihi præteritos referat si Jupiter annos!* But grief is vain, and past days will not return. Only one thing remains, only one thing is possible; to leave to posterity what advice I can, by showing the way in which our teachers have led us into errors, and the method of remedying those errors. May I do this in the name and under the guidance of Him who alone can number all our faults, and make our crooked things straight."

Instruction will usually succeed, if the method follows the course of nature. Whatever is natural, goes forward of itself.

-Instruction should begin in early youth, when the mind is yet free; and should proceed by steps, in proportion to the development of the powers.

The schools are wrong, in first teaching languages, and then proceeding to other things. And boys are kept for several years in studies which relate to languages, and only then are they put to real studies, such as mathematics, physics, etc. And yet the thing is the substance, and the word the accident; the thing is the body, and the word the clothing. Things and words should be studied together, but things especially, as being the object both of the understanding and of language.

* Didact. 42-5.

The practice is wrong of making grammar the beginning of instruction in language, instead of beginning with an author, or a properly arranged word-book; for the author or the word-book contain the material of the language, and the form should be afterward added to it from the grammar.

-Examples should precede abstract rules; and in general, matter should precede form, everywhere. Too many things should not be studied at the same time, but one after another.

The scholar should be introduced into a sort of encyclopædia of what he is learning, which should be gradually developed further and further.

Each language, science, or art, should be first taught in its simplest rudiments, then more fully, with rules and examples; and afterward systematically, with the addition of the anomalies.

Instruction should be carefully given in successive classes, so that the lower class may have completely gone over the ground preparatory to the higher, and that the higher shall, on the other hand, confirm what was learned in the lower. Nature proceeds by continual progress, but yet so that she usually does not give up any thing preceding, at beginning something new, but rather continues what was begun before, increasing it and carrying it to completion. Each class should be finished in a fixed time.

Youth should not be molested at first with controversies; no one would ever be established in the truth, if his first instruction should consist in discussion.

It is not good for a boy to have many teachers, since they would hardly follow the same method, and thus they would confuse him. All studies should be taught in a natural, uniform method, and from books of a uniform character.

Even teachers of less ability will be enabled by such books to instruct well, because the book will make a beginning for them.

Friendly and loving parents and teachers, cheerful school rooms, play-grounds near the school houses, and systematic and natural instruction, must all contribute to the success of teaching, and to counteract the usual dislike to the school.

Most teachers sow plants instead of seeds of plants: instead of proceeding from the simplest principles, they introduce the scholar at once into a chaos of books and miscellaneous studies.

The grammar of a foreign tongue, for example the Latin, should be adapted to the mother tongue of each scholar; since different mother tongues stand in different relations with the Latin.

In learning a foreign tongue, the course of proceeding should be

from the understanding of it to writing it, and afterward at the right time, further, to speaking it, when improvising will be necessary.

Things near at hand should be learned first, and afterward those lying further and further off.

The first education should be of the perceptions, then of the memory, then of the understanding, and then of the judgment. For knowledge begins with mental perceptions, which are fixed in the memory by the apprehension; then the understanding, by inductions from single apprehensions, forms general truths, or ideas; and lastly, certain knowledge proceeds from the operation of the judgment upon things before understanding.

The scholar should not learn by rote what he does not understand.

He should learn nothing which is not useful for one or another mode of life;* he is preparing himself not only for knowledge, but also for virtue and piety.

All studies must be as much as possible worked into one whole, and developed from one root. The relation of cause and effect must everywhere be shown.†

We learn, not only in order to understand, but also to express and to use what we understand.‡ As much as any one understands so much ought he to accustom himself to express, and on the other hand he should understand whatever he says. Speech and knowledge should proceed with equal steps.

If the teacher is obliged to instruct a great number of scholars, he should divide his class into *decuriae*, and should set over each a decurion, to assist him.

Reading and writing should be learned together.

Youth should be made to understand, not the appearances of the things which make impressions upon their minds, but the things themselves.

Instruction must begin with actual inspection, not with verbal description of things. From such inspection it is that certain knowledge comes. What is actually seen remains faster in the memory than description or enumeration, a hundred times as often repeated. For this reason, pictures, Biblical scenes for example, are strongly to be recommended.

The eye should first be directed to an object in its totality, and

* *Ea siquidem discenda sunt in terris, monet Hieronymus, quorum scientia perseveret in coelos, 88.*

† *Omnia doceantur per causas, 95. Scire est rem per causas tenere, 118.*

‡ *Quae quis intelligere docetur, doceatur simul eloqui et operari, seu transferre ad usum, 96. This reminds us of Bacon.*

afterward to its parts. This is true not only of the mental, but of the bodily vision.

All the parts, without exception, should be dealt with, and their various relations.

The distinctions of things should be properly brought out. *Qui bene distinguit, bene docet.*

Each study should be learned by practice; writing by writing, singing by singing, etc. The master must first perform the thing before the scholar, to be imitated by him, without tiresome theoretical explanation. For man is *animal μμητικον*.

In practicing any thing, a beginning must be made with the first elements, and gradual progress must follow to the more difficult and intricate parts of it. First, for instance, from letters to syllables, words, etc.

Imitation must, in the beginning be strictly conformed to the model; and the pupil must, only by degrees, attain to freedom and independence. Thus, at first, he must copy very carefully the copy set by the writingmaster; and only after long practice does he attain to an individual hand writing.

Languages. The mother tongue should be learned first, then the language of some neighboring nation, and only then Latin, Greek, Hebrew, etc.; and always one at a time. Several should not be commenced at the same time, for this would confuse. When the scholar is well acquainted with several languages, he may begin to compare them by the lexicon and grammar.

Any language is learned better by practice, by hearing rapid reading, writing off, etc., than by rules. These are to come in aid to the practice and to give it certainty. The rules of language should be strictly grammatical, not subtile and philosophical.

At learning a new language, the scholar's attention should be directed to the differences between its grammar and the grammar of the language which he already knows; and should not be obliged to repeat every time things common to both.

Only the mother tongue and Latin should be learned with entire completeness.

Comenius gives earnest directions for training boys to right wisdom, moderation, manliness and uprightness, by practice, teaching, and the example of the old. The tares sown by Satan, and the perversions of nature, must be withstood by the discipline of warning and chastisement.* The children, he says, must be taught to seek God, to be obedient to him, and to love him above all things; and that

* *Verbis et verberibus.*

from an early age.* This will not be so difficult to teach as many think; they may not, at the beginning, understand what they are doing, but the understanding of it will come afterward of itself. Has God commanded that we shall offer him all firstlings, and shall we not offer him the firstlings of our thoughts, our speech, our efforts and actions? The children should early be taught that not the present, but everlasting life, is the object of our being, that time is a preparation for eternity; so that their eyes may not be withdrawn by earthly cares from the one thing needful. Therefore, must they from their earliest youth, be led in the road which leads to God; in the reading of the Holy Scriptures, in attendance upon divine worship, and in doing good. "Oh may God give them grace," cries Comenius,† "to find the way which shall teach them well how to cast upon God all things with which our souls busy themselves, other than God; to cast upon God all the earthly cares in which the world is busied and buried, in striving after the heavenly life!"

Inwardly and outwardly, must they be trained to religion; outward training alone makes hypocrites, who fear God only in appearance; inward training alone makes fanatics, who fall into visionary views, disowning the ministry, and destroying the good order of the church.‡

II. JANUA RESERATA.

The preface treats of the purpose and arrangement of the book.

Facts show, says Comenius, that up to this time, the proper method of teaching languages has not been understood in the schools; after ten years and more have often been devoted to it without any remarkable result. Youth have been occupied for several years with prolix and confused grammatical rules, and at the same time § crammed "with the names of things, without the things themselves." "But," continues Comenius, "although the names signify the things, how can they signify them to any good purpose, if the things themselves are not known? A boy may be able to say over a thousand times a thousand names, but if he has not the mastery of the things, of what benefit will all that multitude be to him?"||

It has been thought to remedy the evil, by the introduction of the

* *Perfrui conscientiae voluptate. Fruimur Deo in amore et favore ejus ita acquiescendo ut nihil nobis in coelo et terra optabilius sit Deo ipso.*

† *Didact.*, 144.

‡ The school plan which Comenius gives in his *Didactica Magna*, will be given further on; as well as extracts relating to Realism.

§ I shall quote indifferently, from the Latin and German texts of the *Janua*.

|| *Est enim nocentissimarum fraudum non postrema. quae humano generi, imo et doctorum vulgo, nukum illud, in linguarum scientia locare sapientiam.* Thus says Comenius, in one of his latest works. *Ventilabrum*, opp. *did.*, 460.

classics into the schools, with the idea that pure Latin and the knowledge of things could together be learned from them. "But this notion, how plausible soever, is in the highest degree harmful." In the first place, the boys can not provide themselves with the classics, and in the second, they are not old enough for them. And even if "one had been through all the classics, he will still find that he had not attained his object, namely, a sufficient knowledge of the language; for the language does not treat of every thing, and even if it treated of all matters current in its time, it could neither treat of such as are current in our own times, nor know any thing about them; so that it would be necessary for him to read many more books, both of old and new authors; as, for instance, upon plants, metals, agriculture, war, and architecture; and, in truth, there would be no end to his accumulation of books." How much time would be needed to learn a language in this way!

For this reason it is desirable "that a short compendium of the whole language should be prepared, in which each and all of its words and phrases should be brought together in one body, so as to be understood in a short time, and with less trouble, and so as to give an easy, appropriate and certain introduction to the authors who treat of the subjects themselves." Just as it would be easier to take a survey of the beasts in Noah's ark, than if they had to be searched out all over the world; so it would be easier to learn all the words from such a compendium, than to gather them together from innumerable authors. Such a compendium had been made by a Jesuit some years before; he having published a *Janua linguarum* in Latin and Spanish, which contained, in twelve hundred proverbs, the most usual Latin words, so that, (particles excepted,) no word appeared more than once. This book was enlarged in 1615 with the English translation, afterward with German and French ones; and later, in 1629, appeared in eight languages.*

This book, however, did not fulfil its promise. First, many words were wanting in it, which are needed in daily use; and it contained many useless ones. Secondly, words of several significations appeared in it only once, and then only with one meaning. If this

* Further information upon this *Janua* will be found, Didact. works, 2, 81, 270. Its title is, "*Janua linguarum sive modus ad integritatem linguarum compendio cognoscendam maxime accommodatus; ubi sententiarum centuriis aliquot omnia usitatiora et necessaria vocabula semel comprehensa sunt, ita ut postea non recurrant.*" Its author was an Irishman, W. Bateus, a Theatin at Salamanca. Isaac Habrecht, a physician at Strasburg, reprinted this *Janua* in Germany. Caspar Scioppius published it in 1627 in Latin and Italian, under the title of *Mercurius bilinguis*, and in 1636 at Basle, as *Mercurius quadrilinguis*. (Latin, German, Greek and Hebrew.) Bateus' object was to promote the spread of Christianity by his book, by enabling the heathen to learn Latin easily by means of it.

meaning had been the first, simplest and radical one, an intelligent person could easily have guessed out the others. But this was not so; most of the words being given in derived, metaphorical, metonymic, etc., meanings. Lastly, the work contains many sayings with no meaning, and others not edifying. For these reasons Comenius undertook to remedy these faults, from a "desire to promote the profit and piety of the young." What he undertook to do was as follows:

"Since," he says, "I consider it an established law of the art of teaching, that understanding and speech must go in parallel lines, and that one should be able to express whatever he comprehends with the understanding, (since what difference is there between one who understands what he can not express and a mere dumb image? and to speak without understanding is only parrotry,) I have come to the conclusion that all things in the world ought to be arranged in distinct classes, so that the boys can understand them; and what is to be expressed in speech, namely, things themselves, should be first impressed upon the mind." Thus have arisen his "hundred generic names of things."

He thus brought together eight thousand words, in one thousand complete sentences, which he made at first short and more simple, and afterward longer and more complex.

Further, he has endeavored to bring forward, to be first understood by the boys, all words in their proper and natural signification, "except a few." Words of several meanings he has given more than once, in their different meaning. Synonyms and words of opposite meanings he has given opposite each other, "and has so arranged that each shall assist in the understanding of the others."

At the same time he has so prepared the sentences that they are valuable as grammatical exercises.

This preface is followed by the one hundred chapters which treat *de omni scibili*, in one thousand sentences. The first is an introduction, in which the reader is saluted, and informed that learning consists in this: to know distinctions and names of things; and that to attain this is not so very difficult. In this short little book, the reader will find explained, "the whole world and the Latin language." If the reader should learn four pages of it by rote, he would "find that his eyes were opened to all the liberal arts." Then follows the second, which treats of the creation of the world, and so on to the ninety-ninth, which treats of the end of the world; the one hundredth is his farewell advice to the reader.

-III. REALISM OF COMENIUS.

Such, substantially, is the little book which was translated into twelve European, and several Asiatic languages. I shall, hereafter, speak of the subsequent revision and enlargement of it. If it is asked how came about so great a success, I reply, it was partly from the pleasure found in the survey of the whole world, adapted both to young and old, and at a day when no great scientific requirements were made. Many were amused by the motley variety of the imaginations and investigations of the book; by its old fashioned grammatical, didactic and rhetorical discussions, and its spiritual extravagances. The greatest influence was, however, exerted by the fundamental maxim of the book; that the knowledge of a language, especially of Latin, should go hand in hand with knowledge of the things explained in it. By this principle, Comenius is distinguished from the earlier pedagogues; and he sought to bring it into natural operation in many ways.

From his *Physics*, which appeared in 1633,* we may see how thorough a pedagogical realist he was. He received his first impulse in this direction, as he himself relates, from the well known Spanish pedagogue, Ludovicus Vives, who came out against Aristotle, and demanded a christian instead of the heathen mode of philosophizing. It is not disputation which leads to any result, said Vives, but the silent observation of nature. It is better for the scholars to ask questions and to investigate, than to be disputing with each other. "Yet," says Comenius, "Vives understood better where the fault was, than what was the remedy."

Comenius received a second impulse from Thomas Campanella,† who, however, did not satisfy him. "But when," he says "*Bacon's Instauratio Magna* came into my hands, a wonderful work, which I consider the most instructive philosophical work of the century now beginning, I saw in it, that even Campanella's demonstration was wanting in that thoroughness which is demanded by the nature of things.‡

* The preface was written at Lissa in 1632. The information following is from it.

† Campanella was born in 1568, at Stilo in Calabria, and died in 1639 at Paris. He was a Dominican. Being accused of a state offense against the Spanish monarchy, he was imprisoned in 1599 and only released in 1626, at the request of Urban VIII. Of his works, those which had most influence upon Comenius, were his *Prodromus philosophiæ restaurandæ*, *Realis philosophia epilogistica*, and *Libri de rerum sensu*.

‡ I may here be permitted, in order to a complete characterization of Comenius, to repeat something of what I have already said of Bacon's influence on teaching. In this connection I shall quote the Opp. did., I, 426, where he says, "*Non est nihil, quod Verulamius mirabili suo organo rerum naturas intime scrutandi modum infallibilem detexit.*" And in another place, (p. 432,) he praises Bacon's "*artificiosam inductionem, quæ revera in naturas abdita penetrandi reclusa via est.*" Elsewhere, Comenius cites Bacon, or uses expressions (E. g., "*Infelix divortium rerum et verborum,*") and states views, which refer us to Bacon.

Yet again, I was troubled, because the noble Verulam, while giving the true key of nature, did not unlock her secrets, but only showed, by a few examples, how they should be unlocked, and left the rest to future observations to be extended through centuries." He goes on, in the preface to the *Physics*, from which these extracts are taken, to say that he is convinced that it is not Aristotle who must be master in philosophy for Christians, but that philosophy must be studied freely by the indications of nature, reason and books. "For," he continues, "are we not as well placed in the garden of Eden, as were our predecessors? Why can we not use our eyes, ears, and nose as well as they could? And why did we need other teachers than these, in learning to know the works of nature? Why, say I, should we not, instead of these dead books, lay open the living book of nature? In this there is much more to display than one person like myself can relate, and the display will bring much more, both of pleasure and profit." "Moreover," he adds, evidently following Bacon, "we are so many centuries beyond Aristotle even in experience."

From these extracts it is evident that Comenius, like Bacon, aimed at a real realism, not at a simply verbal one; at one which should operate by the direct observation of things by the senses, not by the narratives and descriptions of others. This appears clearly also, from many portions of his other works. Thus, he says, in the *Didactica Magna*: "To instruct youth well, is not to cram them with a *mish-mash* of words, phrases, sentences and opinions, gathered from reading various authors, but to open their understandings to the things themselves, so that from them, as from living springs, many streamlets may flow." Again: "Hitherto, the schools have done nothing with the view of developing children, like young trees, from the growing impulse of their own roots, but only with that of hanging them over with twigs broken off elsewhere. They teach youth to adorn themselves with others' feathers, like the crow in *Æsop's* fables. They do not show them things themselves, as they are, but tell them what one and another, and a third, and a tenth, has thought and written about them; so that it is considered a mark of great wisdom for a man to know a great many opinions which contradict each other. Thus it has come to pass, that most scholars do nothing but gather phrases, sentences and opinions, and patch together their learning like a cento. It is of such that Horace says, '*O imitatorum servum pecus!*' Of what use is it to vex one's self about others' opinions of things, when that which is needed is, the knowledge of the things themselves? Is all the labor of our lives to be spent in nothing except in running after others who are employed in all sorts of directions? Oh ye

mortals, let us hasten without circuit, toward our object. If our eyes are fast and clearly fixed upon this, why do we not together steer toward it? why should we prefer to see with others' eyes, rather than with our own? Almost no one teaches physics by actual observation and experiment: all instruct by the oral explanation of the works of Aristotle or some body else. In short, men must be led as much as possible, to gather their learning, not from books, but from the observations of the heavens and the earth, oak trees and books; that is, he must know and investigate things themselves, not merely the observations and explanations of others about them. And thus we shall be again following in the footsteps of the ancients." Comenius' meaning is too clear to need an explanation. Further on,* he goes more fully into the method of instruction. The object must be a real, true, useful thing, capable of making an impression upon the senses and the apprehension. This is necessary, that it may be brought into communication with the senses; if visible, with the eyes, if audible, with the ears, if odorous, with the nose, if sapid, with the taste, if tangible, with the touch. The beginning of knowledge must be with the senses.† "Must not, therefore," he asks, "the beginning of teaching be, not at all with the verbal explanation of the things, but with the real intuition of them? and then first, after the presentation of the thing itself, may the oral explanation be added, for the further elucidation of it." What has thus been perceived by the senses, sinks deep into the memory, and can not be forgotten; an event is better remembered, if one has lived through it, than if he has heard it related a hundred times. Thus says Plautus, "One showing to the eye is more than ten showings to the ear."‡ One who has, with his own eyes, seen a corpse dissected, better understands the anatomy of the human body, and gets more insight into it, than if he had read the greatest quantity of anatomical books, without having seen it. Hence the old proverb, "Demonstration must make up for intuition."

If here and there a thing is wanting, one or another thing may make up for it. So, for example, pictures, such as are to be found in botanical, zoological, geographical, and other books. Such should be in every school; for although they cost much, they are of much use.

IV. COMENIUS' THREE SCHOOL BOOKS, THE VESTIBULUM, THE REVISED JANUA RESEERATA, AND THE ATRIUM.

A. Vestibulum.

Soon after publishing the *Janua reaserata*, Comenius wrote a small

* *Didactica Magna*, p. 115, etc.

† Comenius repeatedly refers to his maxim, *Nihil est in intellectu, quod non prius in sensu*.

‡ Comenius also quotes Horace's "*Segnius irritant animas*," etc.

school book called *Januae reseratae Vestibulum*,* of only 427 short sentences.

About 1648 he published a revival of it,† and a second in 1650, while at Patak, employed in re-organizing the schools there.‡ He intended this second revival as a manual for the lower classes of this school; I will briefly describe its form and contents.

It begins with an *Invitatio*; the teacher promising to the scholar an introduction to wisdom, to the knowledge of all things, to the ability to do right always, and to speak correctly of every thing, especially in Latin, which, as a language common to all nations, is indispensable to a learned education. In the *Vestibulum* the foundations of language are laid, in the *Janua* the materials for building are furnished; and in the *Atrium*, the decoration of the edifice is begun. After this the scholar may enter the palace of authors; that is, their wise books; by the perusal of which he may become learned, wise and eloquent.

The second part treats of the classification of things; that is, of substantives only, E. g.: *Sidera sunt, sol, luna, stella. In sole sunt, lux, radius, lumen. Sine lumine est; umbra, caligo, tenebras.*

Aplid uanionem; farcimen, perna, lardum, arvina, adeps, sebum, etc.

In the third part, the modifications of things are brought forward, adjectives being the most prominent words, E. g.; *Sol est clarus vel obscurus. Luna plena vel dimidia. Stella fixa vel vaga.*

The fourth part is headed *mentiones rerum*. E. g.; *Quis ibi est? Is quem vides. Quid fert? Id quod vides.* It explains especially the pronouns.

In the fifth section, headed *motus rerum*, verbs are introduced. E. g.; *Quasque res potest aliquid esse, agere, pati. Dei actio est creare, sustentare, beare. Sentire est, videre, audire, etc.* After this comes the varieties of human action, e. g., *per membra corporis, per animam, etc.*

The sixth section, headed *Modi actionum et passionum*, includes the adverbs. E. g., *Ubi est? hic, illic, ibi, etc.*

The seventh, headed *Circumstantiae rerum et actionum*, brings in the prepositions. E. g., *Quod movetur, movetur ab aliquo praeter aliquid, ad aliquid.*

The eighth, headed *Cohaerentiae rerum et actionum*, contains conjunctions. E. g., *Ego et tu, illeque sumus homines, etc.*

* *Opp. did.*, 1, 302. Preface dated 4th January, 1633.

† *Opp. did.*, 2, 293. Preface undated. This *Vestibulum* immediately followed the *Methodus Novissima*, in which, (p. 163, 173,) it is described. Only a fragment of it is in the *Opp. did.*

‡ *Opp. did.*, 3, 141.

The ninth, *Compendia rerum et verborum*, contains interjections. E. g., *Heus tu! Ecce me!* etc.

The tenth is entitled *Multiplicatio rerum et verborum*; and contains some examples of the derivation and relation of words. E. g.; *Doctus, doctor, docet, dociles, doctrinam*, etc.

The *Janua* and the *Atrium* contain each 1,000 sentences, but the *Vestibulum* only half as many, 500.

To the *Vestibulum* are subjoined the rudiments of grammar. Chap. 1 treats of the letters; chaps. 2—10 correspond with the same of the *Vestibulum*, e. g.; chap. 2 treats of nouns, and gives briefly the declensions; chap. 5 of verbs, conjugation, etc.; chap. 10 explains the ideas of primitives, derivatives, compounds, etc., and chap. 11 gives fifteen simple rules of syntax.

This grammar is followed by a *Repertorium vestibulare sive lexi Latini rudimentum*, containing all the words in the *Vestibulum*, alphabetically arranged, with the number of that sentence of the five hundred where it is found. E. g.: *Cano*, (*cecini, cantum*,) 457. And sentence 457 is, *Cantoris est canere*.

In a letter to Tolnai,* teacher of the first (lowest) class at Patak, Comenius writes of his duties as a teacher, and especially of the use of the *Vestibulum*, etc. He (Tolnai) receives scholars who can read and write their mother tongue; and he is to teach them the grounds of Latin and the rudiments of grammar and arithmetic.

The arrangement of the *Vestibulum* might seem to be exclusively grammatical, as it begins with substantives, and proceeds to adjectives, etc. It is in fact, however, in the profoundest sense, an arrangement in the order of things; for it began with the enumeration of the things themselves, and goes on to their principal qualities, (*primaria rerum accidentia*,) and so on.

Comenius would have been glad to illustrate the *Vestibulum* with such cuts as the text requires, to amuse the boys and to enable them better to remember, but was prevented for want of competent artists. The want of such cuts must be supplied by the teacher, by explanations of the things, showing them, or by such delineations of them as may be accessible. If there be not some such reference to them, the instruction will be entirely lifeless. "This parallelism of the knowledge of words and things is the deepest secret of the method." In order that this may be more easily done, this nomenclature (of the *Vestibulum*) is to be translated into the mother tongue, and with this translation the scholars are to be first taken over the ground before any study of Latin. Thus their whole attention will be confined to

* This latter reminds us strongly of Sturm's *Epistolae classicae*.

the things; they will not be required at the same time to attend to unknown things and unknown languages, but only to the first.

B. Janua.

I have already described the *Janua reserata* of 1691, the first edition. But the *Janua* which Comenius describes in the *Methodus Novissima*, is different from this. The latter consists of a text, similar to that of the original *Janua*, but to which is added a lexicon, and to this a grammar; there being thus three parts, as in the *Vestibulum*.*

Comenius brought out the third edition of the *Janua*, at the same time with the third of the *Vestibulum*, for the schools at Patak. It does not, however, like the latter, begin with the text and go on to the grammar and lexicon, but in a reversed order, with lexicon, grammar and text. The lexicon is entitled, *Sylva Latinæ linguæ vocum derivatarum copiam explicans, sive lexicon januale*.† It is etymological, showing the derivation of each word. E. g.: *Fin-is-it omnia, et ostendit rei-em,‡ h. e. -alem causam. De-ibus agrorum sæpe sunt lites, quas-itor de-it distinguens agrum tam ab agris -itimis (seu af-et con-ibus) quam a con-iis inde-itis. Si vero inter af-es (af-itate junctos) jurgii exoriantur, judex prae-it diem prae-itum, quo ea-aliter de-itat; nam-ita esse convenit; non in-ita; in-itas Dei est.*

In this manner are arranged some twenty-five hundred roots and their derivations and compounds, with the rules of derivation and composition.

The teacher is to occupy some four months, in the beginning, in taking his scholars through this lexicon; for they must first become acquainted with words, which are the simple elements of language. He calls the lexicon the forest, in which the radical words, with their derivations and compounds, are the trees and their branches. These form the material in which the second book, the *Grammatica janualis continens residuum grammaticæ vestibularis*, is to be used and prepared for the construction of speech.

In the introduction to the grammar, Comenius laments the faults of the earlier teachers of language, quoting especially the valuable teacher Gerard Vossius. "Our grammars," says Vossius, "contain a

* According to *Opp. did.*, 2, 299, this second edition contained only the *Januæ linguarum grammaticæ. Comp. Meth. nov.*; *Opp. did.*, 2, 181.

† *Opp. did.*, 3, 219.

‡ I. e., *Finis finit omnia, et ostendit rei finem, h. e. finalem causam*, etc. For the sake of greater clearness, Comenius afterward, (*Opp.* 4, 60,) required the German equivalent to be added, as

AM-are-or-ator,
Lieb-en-e-haber.
(Lov-e-o-er.)

mass of rules and exceptions which overwhelm the boys, who are obliged to learn much that is superfluous, only soon to forget it; and besides, how many false rules do these grammars contain!" "Lipsius," continues Comenius, "calls them silly; and Caselius, more than silly, and they agree that it would be better to learn Latin only from authors." Comenius, however, does not coincide with them in this; mere practice, he says, is blind; it is only by rules that they attain to the sure comprehension. He says further, in speaking of the *Grammatica Janualis*, subjoined to the *Vestibulum*, that it follows especially G. Vossius.

The succession of chapters in this grammar is:* *De Litera, Syl-laba, Voce, Phrasi, Sententia, Periodo, Oratione*. It proceeds from the simple beginnings of the *Grammatica Vestibularis*, leaving, however, the subtilities and delicacies of the language for a higher class.

From this grammar the scholar goes on to a third part, a *Janualis rerum et verborum contextus, historiolarum rerum continens*. This is a revision of the earlier *Janua reserata*, but more extensive and complete, although, like it, containing a thousand paragraphs, in a hundred sections. In the first *Janua* each paragraph usually consisted of one short period; but in the second the paragraphs are often much longer.

C. Atrium.

Comenius describes the *Atrium*† in his *Methodus novissima*; but he first published it for the school at Patak.§ Like its predecessor, it is divided into three parts; but its arrangement, like that of the *Janua*, varies from that of the *Vestibulum*; a grammar coming first, then the text, and then the lexicon: Comenius calls the grammar of the *Atrium*, *Ars ornatoria, cive grammatica elegans*. He defines it, "The art of speaking elegantly. To speak with elegance is, to express the thoughts otherwise than the laws of the mother tongue require, and yet to be understood with more pleasure than if we had spoken according to those laws." From this definition it follows, that Comenius was not speaking of what they called fine Latin, free from barbarisms, but of such Latin as was then used in rhetorical exercises.

After the grammar follows the *Atrium* itself; which, also, is an encyclopædia of one thousand paragraphs, in one hundred sections, but more extensive and advanced than that in the preceding *Janua*.

* Opp. did., 3, 423.

† Ib., 474.

‡ Ib., 451. There is here a great error in the paging; p. 451 following 592.

§ Opp. did., 2, 163, 197, 458. David Beehner published before Comenius, in 1636, a fragment entitled *Proplasma templi Latinitatis*, (Opp. did., 1, 318,) which, like the *Atrium*, was to follow the *Janua*.

To this Comenius had intended to add a *Lexicon Latino-latinum* ; which, however, did not appear.

V. THE CLASSICS.

After the scholars had used, in their first year, the *Vestibulum*, in the second the *Janua*, and in the third the *Atrium*, as preparatory manuals, they were next, in a fourth class, to enter, from the *Atrium*, into the palace of authors. "For," says Comenius,* "if we should not, through the *Vestibulum*, the *Janua*, and the *Atrium* introduce the scholars into the palace of authors, we should be as foolish as one who, after with much pains, seeking, finding and pursuing his road to the very gates of a city, should refuse to enter." The scholars of this fourth class are, in their first quarter of a year, to practice the ordinary Latin style; in the second, speeches from the Roman histories, and the Ciceronians, for the sake of the oratorical style; in the third, to read Ovid, Horace and Virgil, to learn the poetical style; and afterward to study the laconic authors, especially Seneca and Tacitus, and to begin studying the composition of letters, speeches and poetry.

In his *Methodus Novissima*,† he gives fuller directions what authors to read and how to read them. His three text-books, he says here, enable the scholar to understand Latin, and to write and read it not unlatinistically. He must then proceed to the authors, in order from them to gain a fuller knowledge of real things, a better style, and practical readiness. He must not restrict himself to Cicero, as he neither contains all Latinity, nor all subjects. Terence and Plautus must be read with caution, on account of the immoral character of some of their contents. For speaking Latin, however, they are the best; as is Cicero for the construction of periods. For the laconic style, Seneca is the model, Virgil for the epic, Ovid for the elegiac, and Horace for the lyric. An acquaintance with real objects can be gathered from Pliny, Vitruvius, Cæsar, and others. Authors must be read thoroughly, and extracts and imitations may be written; this last in part by means of translations and re-translations; and then abridgments and continuations come, and finally the contents of the classics are to be transferred to other persons, relations, etc. For this purpose the scholar must adopt only a single model, Cicero for instance, and train himself to a style by daily and hourly exercises‡

* This, he says in his treatise upon the school at Patak in three classes, the necessity of adding a fourth, and its purpose. See below, *Schola pansophica*.

† Opp. did., 2, 199.

‡ "For he must feel himself so transferred into his author's spirit, that nothing will be grateful to his ears, which has not the sound of Cicero." Ib., 205.

upon that model. Yet he must be very careful lest he become a mere empty phraseologer.*

Comenius expresses himself with greater rigor against the heathen books, in his earlier *Didactica Magna*.† "Our schools," he says, "are Christian only in name; Terence, Plautus, Cicero, rule over them. Therefore it is that our learned men, even our theologians, belong to Christ only in externals, while Aristotle has the real authority over them. Day and night they study the classics, and neglect the Holy Scriptures. Shall our boys, for the sake of a style, study the indecency of Terence, Plautus and the like? Shall we in this way cast oil upon the fire of men already lost? Although these authors have many good portions, still, the evil they contain sinks at once deep into the souls of the boys. Even the better of the classics, Cicero and Virgil for instance, have whole pages entirely unchristian. Yet, as Israel took the vessels of the Egyptians,‡ so many learned men of confirmed Christian character, make collections of extracts from the classics, which may be read by youth without danger. Perhaps Seneca, Epictetus and Plato, only, may be put whole into the hands of youth already confirmed in Christianity." But to avoid any misunderstanding, as if he had forbidden without explanation, to read the classics, he refers to the promise of Christ, that believers shall be harmed neither by serpents nor by poison. Only boys who are yet weak in the faith, must not be exposed to such serpents, but fed with the pure milk of God's word.

He expresses himself in the strongest manner upon the study of the ancients, in one of his latest pedagogical works, which he has named "The Winnowing-fan of Wisdom."§ Here he says, "We have seen in very recent times frightful examples of kings and queens,|| who, seduced by heathen books, have despised the simplicity of the gospel. If such learned men as Lipsius and others, who have become drunk with the classics, should be examined, there would be found in them nothing like David's pleasure in the law of God, but on the other hand a disgust with it."

* "Not without reason did the wise Buchholtzer write, 'I dislike the Italian Ciceronians, because they speak only words; not things. Their rhetoric, for the most part, is *colacurich*. It is a goose without a text, a nut without meat, a cloud without rain. Their feathers are better than the birds themselves.'" Comenius was evidently acquainted with the *Ciceronians* of Erasmus; and like him, he found especial fault with the paganism of Bembo and the other Italians.

† Opp. did., 147.

‡ This same comparison occurs in Augustine's Confessions, (7, 9,) in relation to the reading of the heathen philosophers by Christians.

§ *Ventilabrum sapientiae*. Opp. did., 4, 47. A remarkable retraction.

|| Referring apparently to Christina of Sweden.

As to the reading of the ancients, Comenius was in the same perplexity with many other Christian teachers. He feared the influence of the heathen books upon youth; but at the same time these same Christian youth must learn thoroughly to speak and read Latin. Latin would be, without doubt, best learned by the repeated reading of Terence; but then again Terence is so indecent! How was this dilemma to be solved?

VI. *ORBIS PICTUS.*

Besides the three school books with which we have become acquainted, the *Vestibulum*, the *Janua* and the *Atrium*, Comenius wrote a fourth. This is the *Orbis Pictus*, which, since its first appearance in the year 1657, has been, during nearly two hundred years, down to the present time, and in the most various forms, the favorite book for children. Comenius had deeply felt the imperfection of his school books in one respect. He desired that the beginning of teaching should be always made, by means of dealing with actual things; and in the school-room, there was nothing which could be thus used. "It may be observed," he writes to the bookseller, Michael Endter, of Nuremburg,* "that many of our children grow weary of their books, because these are overfilled with things which have to be explained by the help of words; things which the boys have never seen, and of which the teachers know nothing." By the publication of the *Orbis Pictus*, however, he says, this evil will be remedied.

We have seen that Comenius was desirous that the text of his *Vestibulum*, long before, should contain pictures; but he could find no artists capable of designing the pictures, and cutting them on wood under his supervision. In the letter above alluded to, he most earnestly thanked Endter for having undertaken the designs. "This work," he writes to him, "belongs to you; it is entirely new in your profession. You have given a correct and clear edition of the *Orbis Pictus*, and furnished figures and cuts, by the help of which, the attention will be awakened and the imagination pleased. This will, it is true, increase the expense of the publication, but it will be certainly returned to you." Comenius says further, that the book will be very welcome in schools, since it is entirely natural to look at pictures; and still more welcome, since now instruction may progress without hindrance, and neither learning nor teaching need delay, since what is printed in words may be brought before the eyes by sight, and thus the mind may be instructed without error.

* The letter is dated at Lima, 1655, and is printed before the edition of the *Atrium* issued by Endter in 1659.

I have thought it scarcely necessary to give a detailed description of this celebrated school book, for, as I have said, it has been published in innumerable editions, down to the present day. The old *Orbis Pictus*, varies little as to text, from the *Janua reserata*; it is the *Janua* with illustrations. The cuts in the later editions are clearer than in the old; but the variations of the texts are not successful. The comparison is especially striking between the forty-second cut, entitled "Of the soul of man," in the edition of 1659, and the same in the edition of 1755. In the first, the soul is very ingeniously represented in a bodily shape, by uniform points, without light or shade, like a phantom. The artist evidently wished to indicate that the soul, so to speak, was present throughout the whole body. In the *Orbis Pictus* of 1755, on the other hand, the picture is an eye, and on a table the figures I.I.II. I.I.II. It is difficult to recognize in this an expressive psychological symbol, and to explain it.

The *Janua reserata* of Comenius, notwithstanding its former great celebrity, is forgotten; the *Orbis Pictus*, on the contrary, is known and liked by many, if not in its old form, at least in a new one. The principle that the knowledge of things and of words should go hand in hand, was, it is true, laid down by Comenius in the preface of the *Janua*, but was not realized in the book itself. Hence, very naturally, the complaints of teachers and scholars, of the incompleteness of the book.

But in the *Orbis Pictus* this principle was found to be realized as far as possible; and many persons* said that they did not need the *Vestibulum* and the *Janua*, for that the shorter way in the *Orbis Pictus*, was enough. There was, it is true, a world-wide difference between what Comenius originally sought—an acquaintance with things themselves, before any knowledge of words relating to those things—and the actual use made of the scarcely recognizable pictures of these originals in the *Orbis Pictus*, in connection with the reading of the text. Yet this is at least a beginning; and who can tell what may be, in the course of time, developed from it? Basedow's elementary book is the *Orbis Pictus* of the eighteenth century. Chodowieck's pictures in this work, are much superior to the old wood-cuts of the *Orbis*; but in other respects, how far does the godless Elementary Book, filled with false explanations and superficial and materialistic realism, fall behind the ancient earnest and religious *Orbis Pictus*!

A very valuable commendation of the *Orbis Pictus* is to be found in the *Isagoge* of Joh. Matth. Gesner.† "For beginners in language," says Gesner, "books are proper, from which, at the same time, a

* Opp. did., 3, 830.

† 1, 112.

knowledge of things themselves may be gained. For the younger scholars, especially, the *Orbis Pictus* of Comenius, which I very much like. Not that the work of Comenius is complete; but we have no better."

I repeat, the *Orbis Pictus* was the forerunner of future development; and had for its object, not merely the introduction of an indistinct painted world into the school, but, as much as possible, a knowledge of the original world itself, by actual intercourse with it.

VII. COMENIUS' PLAN OF STUDY.

A. Three schools. Academy.

Comenius, in his *Didactica Magna*, gives a general plan of study, which, upon comparison with the school ordinances of Saxony and Wurtemberg, already mentioned, appears to have been generally similar to existing ones. He proposes the four following classes of institutions; A. *Schola materna*, (mother's school;) B. *Schola vernacula*, (vernacular school;) C. *Schola Latina*, (Gymnasium;) D. *Academia*, (University.)

A mother's school, he says, should be in every house; a vernacular school in every municipality; a Latin school in every city, and a university in each kingdom or large province.

Pupils are to remain in the mother school until their sixth year, from the sixth to the twelfth in the German, and from the twelfth to the eighteenth in the Latin, and from the eighteenth to the twenty-fourth at the university. In the mother school the external senses especially are to be trained in the right apprehension of things; in the German school, the inner senses; the imagination and the memory. Here, also, must the pictures of things which are impressed upon the mind through the external senses, be together brought out into expression, by the hand and the tongue, by reading, writing, drawing, singing, etc. In the gymnasium, the understanding and the judgment are to be trained by comparing, distinguishing, and the deeper investigation of things. In the university, the will is to be cultivated.

After this Comenius proceeds to describe each of his four schools,

A. The Mother School.

We should pray for the *Mens sana in corpore sano*, but should use means for it also. Even during pregnancy, the mother should pray for the well-being of the embryo, should live upon suitable diet, and should keep herself as quiet and comfortable as possible. She herself must nurse the new-born child; it is a most injurious custom which prevails, especially among noble ladies, of employing nurses;

a custom harmful both to mothers and children, and contrary to God and to nature. Even the wolves and the swine suckle their own young.*

From vanity or convenience, nurses are often employed who are weaker than the mothers themselves.

No high-seasoned food should be given to children, and still less any heating drink; the Spartans dared drink no wine until their twentieth year. Unnecessary medicine is poison to children. They should be allowed to play as much as they wish.

During the first six years, the foundation should be laid for all that they are to learn in all their lives.

In physics, they should begin to learn to know stones, plants, beasts, etc.; and the names and uses of the members of their own body.

In optics, they should begin to distinguish light and darkness and colors; and to delight their eyes with beautiful things.

In astronomy, they should learn to know the sun, moon, and stars, and that the moon is sometimes full and sometimes sickle-shaped.

They should begin geography with the knowledge of the cradle, the room, the farm, the streets, the fields; chronology, with the knowledge of day and night, hours, weeks, and festivals; history, with the knowledge of what happened to themselves yesterday and the day before; politics, with the knowledge of domestic economy; arithmetic, with counting, etc.; geometry, with understanding the ideas of length and breadth, lines, circles, an inch, an ell, etc.; music, with hearing singing, (in the third year they will be able to join in psalm singing;) grammar, with the pronunciation of syllables and easy words; rhetoric, with the making of gestures, and the understanding of the gestures of others.

Thus we see the beginning of all the sciences and arts, in the earliest childhood. Even then the children will take pleasure in poetry, rhythm and rhyme.†

Comenius now proceeds to the beginning of the first or ethical part of religious instruction; he requires above all things, that the parents should set a good example; and he inveighs strongly against the unjustifiable spoiling of children, and the want of a wholesome

* "Have you nourished with your own blood the child which you carried beneath your heart for so many months, to deny it milk now, when that very milk was given by God for the child, not for the mother? It is much more conducive to the health of the infant, to suckle its own mother than a nurse, because it has in the womb already become accustomed to nutriment from its mother's blood."

† Comenius gives specimens of rhymes to amuse the children, as:

"*O mi puelle, mi puelle, dormi belle;
Claude belle tu ocellos, curas pelle.*"

strictness.* He also gives directions how to train them to moderation, purity, and obedience; and to silence, as soon as they can speak fluently, and not to speak merely in order to learn to speak. In baptism, children should be given back to their Creator and Saviour; and from that time they should be prayed for and taught to pray; should learn the Lord's Prayer, the creed, &c.

In the sixth year the child will be ready to go to school, which should not be described to him as an institution of punishment. We often hear people say, "If you are not good I will send you to school, and there you will be kept in order with the rod." It should rather be represented as delightful, so that the child shall be pleased with the idea of going.

B. German School.

1. This is peculiarly a school of the mother tongue.†

In this school, says Comenius, the children should not be, as many would have them, put at first to the study of Latin.

All children should be instructed. Whether or no they prove apt at study, and, therefore, proper to be carried forward to the Latin school, is not a thing to be determined in the sixth year. That school is not for the children of the noble alone; the wind bloweth whither it listeth, and does not begin to blow at any fixed time. My method, continues Comenius, does not, by any means, look simply to the Latin, most often so vainly beloved, but rather regards a common way of instruction in all the mother tongues. To teach a scholar a foreign tongue before he knows his own, is to instruct him in riding before he can walk.‡ Finally he says, I aim at knowledge of real things; these can be learned just as well in the mother tongue as in Latin or Greek; and, above all, all technical terms should be learned in German, instead of in Latin or Greek.

He then proceeds to enumerate the studies in the German school; as, to read German, to write well, to reckon, so far as ordinary life will require, to measure, to sing common melodies, to learn certain songs by rote, the catechism, and the Bible, a very general knowledge of history, especially of the creation, the fall of man, and the redemption; a beginning of cosmography, and a knowledge of trades and occupations. All these are necessary, not only for those who are to be students, but also for future farmers, mechanics, &c. The Ger-

* "I can not refrain from reproving the apish and asinine conduct of some parents toward their children."

† Opp. did. 172.

‡ At a subsequent period Comenius found fault with himself for having written his *Vestibulum* in Latin, "*nota decendo per ignota, vernaculam per Latinam. Quicquid notus est precedat, vernacula Latine semper praeceat.*" Opp. did. 4, 51.

man school should be divided into six classes, and for each class a text-book should be prepared in German.

C. *The Latin School.*

Here are to be learned four languages, and the seven studies of the Trivium and the Quadrivium; grammar, dialectics and rhetoric; and arithmetic, geometry, music, and astronomy. Also physics, chronology, history, ethics, and biblical theology. The school is to be divided into the six following classes, to pass through which will require six years: 1. grammar, 2. physics, 3. mathematics, 4. ethics, 5. dialectics, 6. rhetoric.

The scholars are to finish their studies in German and Latin, and to gain a sufficient grammatical knowledge of Greek and Hebrew.

Dialectics and rhetoric, says Comenius, are to be learned only after a knowledge of real things has been acquired. Without the knowledge of things, it is impossible for one to speak practically upon them.* He places physics before the abstract mathematics, as addressed to the senses, and, therefore, easier for beginners.†

D. *The University.*

Although, Comenius says, his method does not extend to the university, yet he will express a few views concerning it. For a university he would have a universal course of study, and an examination of all students entering, to determine for what pursuit each is best fitted, &c. He has one remarkable recommendation; to found a *schola scholarum* or *collegium didacticum*, for those of all countries. The learned men, members of this, should bind themselves to use their united powers to promote the sciences, and to make new discoveries. He thus suggests the idea of an academy of sciences, before the Royal Society of London, the first academy of the kind, was established; following Bacon, however, in this also.

B. *Schola pansophica.*

In 1650, as before related, Comenius was invited to Patak in Hungary, to reorganize the schools there. The plan which he drew up bears the strange title, *Scholae pansophicae delineatio*.‡ And the plan itself is strange. The names of the seven classes are, in part, given upon very singular grounds. The school books of the three lower classes, the *vestibularis*, *janualis* and *atrialis*, were the *Vestibulum*, *Janua*, *Atrium*. After the *Atrium* came, as class fourth, the

* *Ut virginem non impraegnatam parere impossibile est, ita res rationabiliter eloqui impossibile est, qui rerum cognitione praeimbitus non est.*

† Apparently following Bacon's remark, "*Mathematica quae philosophiam naturalem terminare, non generare aut procreare debet.*" Nov. Org. 1, 96.

‡ Opp. did. 3, 20.

philosophical; then the logical, political, and theological or theosophical. These seven classes were arranged to occupy the seven years from the tenth to the seventeenth.

From Comenius' plan, it appears that it was not his intention that Latin and real studies, from the three above named books, should be the only occupation of the three lower classes. The catechism, writing, arithmetic, geometry, and music, were to be added.

The idea of proceeding methodically from the elements forward, is to be recognized everywhere. The first class is to study geometry, with points (!) and lines; the second with plane figures, and the third with solids.*

In the fourth class, Greek was to be studied, and Latin quite passed over; so that it was in the fifth that the Latin authors were first to be read, for the purpose of acquiring a style.†

In each week Comenius set apart an hour for the reading of the newspapers of the day,‡ in order to learn cotemporary history and geography. Sacred music was to be sung daily, and no one not even of noble birth, was to be excused; and specified hours were set for choral music.

Plays and gymnastics, he says, are so far from being to be forbidden, that they are rather to be promoted; as, for instance running, jumping, wrestling, ball, ninepins, &c.; and walks are to be taken with the boys.

Comenius strongly recommends dramatic exhibitions, among other reasons, because the boys will learn "to act well any part." He, however, forbids the immodest pieces of the ancients, and instead, recommends other strange ones, which may be played by the classes. Thus, the fourth class may play Diogenes, the Cynic, or Compendious Philosophy. "The fifth," he says, "may give a very beautiful play, namely, the Contest of Grammar, Logic and Metaphysics, who strive for the preëminence, and in the end kiss each other in a friendly manner, thus showing how they will all labor wisely together in the realm of wisdom, which drama, including fifty persons, is very delightful." The sixth class is to represent Solomon, and the Seventh David.

The walls of the school-room of each class are to be ornamented with pictures and inscriptions, relating to the employments of the classes.

* These examples indicate the same error which afterward appeared in the Pestalozsian school.

† "Verba rara, phrases pulchras, imprimis etiam sententias elegantes, et sic succum omnem extrahant, aus Cicero, Sallust, &c."

‡ Ib., 28. "praelegantur ordinariae mercatorum novellae." The *Mercurius Gallo-Belgicus*, for example.

The whole school and each single class, should represent a republic, and should have a senate, consul, and praetor.

Of the hours of study, three should come in the forenoon and three in the afternoon, and between each two study hours, a half hour of recess should come.

Only the three lower classes of the pansophistic school went into operation; the Hungarian nobility not approving of the four others, which very much grieved Comenius. "When only patchwork is required," he says, "a more complete course of study is impossible; and nothing new can come to pass when people stick to their old habits." He, however, accommodated himself to his station, and composed the treatises "upon an easy, short, and convenient way to read the Latin authors fluently and to understand them clearly, in schools of three classes."*

VIII. LATIN AND THE MOTHER TONGUE.

According to Comenius, the mother tongue was to be studied. For this purpose he required a *schola vernacula*, through which each child was to pass, whether afterward to become a student or not. If he was, then he was to go from the *schola vernacula* into the *schola Latina*. He expresses himself most strongly opposed to the neglect of the mother tongue, and speaks with approbation of Schottel and the Society of Usefulness, who devoted themselves to the German.†

Why did he insist upon having Latin so diligently studied by the boys? His strictness in this respect was not surpassed by that of Trozendorf or Sturm, who altogether neglected the German. Comenius requires from the boys "daily, even hourly exercises in Latin style;" and imitation of Cicero even to entire Ciceronization, and the constant speaking of Latin, both in and out of school.‡

His object was that Latin should become a universal language upon the earth, as an antidote against the confusion of tongues at Babel. What the Romish church sought for the unity of the church, Comenius sought for the unity of humanity; that all nations should be able to understand each other by means of a common speech.

He laid down the principle, that the Latin must be understood in its fullest extent.§ By this, however, he did not mean that every man must understand every word of the language. Even Cicero himself did not understand the expressions of artizans; and very reasonably, because he had not studied their business. In like manner, we do not blame any one for not understanding similar expressions in

* *Opp. did.* 2, 112. The treatise is dated 1651; and includes many things which Comenius had already said in the *Methodus Novissima*.

† *Opp. did.* 2, 219.

‡ *Ib.*, 204, 205.

§ *Ib.*, 122, &c.

his own language. But what he means by the understanding of the language in its whole expression is, an understanding according to each man's own condition and necessities. All must understand the common portions of the language, and, in addition to this, the apothecary must know the technical terms of medicine, the theologian those of theology, &c.*

Comenius has not remained true to this correct principle in his school books. They are crammed with esoteric and technical expressions, which are expected to serve the purposes of general education. He has collected, with inexpressible industry, a multitude of phrases in trade-Latin and market-Latin, it is difficult to say whence; and many of them are, probably of his own composition. Such Latin, Döderlein himself would never understand; and he would usually seek in vain for aid from the lexicon. Take, for instance, the chapter on baking, butchering, or cooking. In the Latin we read; "Placentarum species sunt; similiae, spirae, crustulae, lagana, liba, scriblitae, (striblitae,) teganitae, globuli, boletini, obeliae, tortae, artocreatae." Comenius had good reason for adding a translation here; the kinds of cake are, wheat bread, pretzels, iron-cakes, pan-cakes, short-cakes," &c. The poor boys are to be pitied who had to study such words as *lucanicae, botuli, tomatula, hillae, apexabones, tuceta, isicia*, &c. And for what purpose are they to be studied? to talk Latin to the butcher? and if native Germans were to be addressed in classical Latin, what should they say in reply? in fact, what have been their criticisms upon the Latin of the *Janua reserata*? "*Scâtet barbarismus Janua*," says Morhof, for instance. Comenius allowed that boys and even men know as little of most of the technical terms in their native language, as Cicero did of those in his. Why, therefore, does he lay upon the boys the unendurable labor of learning them all in Latin? Even if Latin were to become the universal language of all nations, of which there is not the remotest prospect, it is altogether impossible that a German butcher would be able to converse with a Turkish or Japanese butcher, in Comenian butchers' Latin.

Eventually, therefore, the Latin of one-third and, probably, of one-half, of the *Orbis Pictus*, is of no use to the scholar; so that the half of the book would be of more value than the whole.

But what was it that caused Comenius to write so superfluous a

* See *Didactica Magna*, p. 127; where Comenius, agreeably to our citation from the *Methodus Novissima*, says; "Thence it follows, that the knowledge of the whole of a language is not necessary to any one; and that if any one undertakes it, he will only make himself ridiculous and silly. For Cicero himself, even, did not know the whole of the Latin language; he himself, confessed that he was ignorant of the technics of artizans; he had never sought the conversation of shoemakers, butchers, and the like, to examine their operations and to learn the names of all their works and tools. And to what end would he have learned them?"

school book, in opposition to the principle which he himself had laid down? I think it was his view of the parallelism between things and words. A world of language corresponding to a world of things was the ideal before his mind.* And if the *Orbis Pictus* was to include the whole real world, the verbal explanation of the illustrations in it must be equally comprehensive.

IX. *METHODUS NOVISSIMA*.†

Twenty years after Comenius wrote the *Didactica Magna*, he published the *Methodus Novissima*, which he had written on the requisition of Chancellor Oxenstiern. This work has not the freshness and boldness of the *Didactica*, but is constructed upon a more regular plan. In truth it was intended to be a plan of studies; to contain the principles which must lie at the basis of every rational plan of study.‡

In this work Comenius names, as the three chief principles of his method, the parallelism of things and words, the uninterrupted succession of introduction, and the easy, natural, and rapid progress made by his system; the scholar being kept in continual activity.§ “If the method,” he says, “could be as clearly written out as it lies in my thoughts, it would be like a well made clock, that goes on steadily, and, by its movements, marks out the hours for sleeping and for all occupations, without varying; and, if it does vary, is easily set right again.¶

The mind thinks, the tongue speaks, the hand makes; hence sciences of things, and arts of working and speaking.

In God are the ideas, the original types, which he impresses upon things; things, again, impress their representations upon the senses, the senses impart them to the mind, the mind to the tongue, and the tongue to the ears of others, by a bodily intercourse; for souls, shut up in bodies, can not understand each other in a purely intellectual way.¶¶

Any language is complete, in proportion as it possesses a full nomenclature; has words for every thing; as the signification of its words are consistent; and as it is constructed after fixed grammatical laws.**

It is a source of errors, when things are made to accommodate themselves to words, instead of words to things.††

* “Condendam suademus rerum et verborum tabulataram quandam universalem, in qua mundi fabrica tota et sermonis humani apparatus totus, parallele disponantur.” Opp. did. 2, 53.

† Opp. did. 2, 1, &c.

‡ Various extracts from the *Methodus* will be given in the proper place.

§ Ib. 211.

¶ Ib. 14.

¶¶ Ib. 24.

** Ib. 50.

†† Ib. 62.

The same classification prevails for words as for things; and whoever understands the relation of words among themselves, will, so much the more easily, study the analogous relations among things.*

The most complete language, says Vives, would be that in which the words express the nature of things, such as must have been the speech of Adam, in which he gave names to things. Comenius believed that there could be composed a real language, in which each word should be a definition, and which, even by its nouns, should represent the nature of the things spoken of.†

To know, is‡ to be able to represent any thing, either by the mind, or the hand, or the tongue. For all is done by such representing and imagining of the pictures of things. If, for instance, I perceive a thing by the senses, its image is impressed upon the brain; if I represent a thing, I impress its image upon the material. But if I express in words the thing which I have thought of or represented, I impress it upon the atmosphere, and through this upon the ear, brain and mind of another. The first kind of representation is called *scire, wissen*; the second and third kinds are called *scire, können*. Thus, Comenius includes in one idea of representation, knowing, the power of representing and the art of speaking. To know is to him a mode of representing in which the individual holds himself in a receptive condition, and the mind receives impressions through the senses, like a living daguerreotype plate. Such is his process of conception. Opposed to this is a process of expression, in which the mind performs its creative operations by the arts of representation and speech.

In every thing known, continues Comenius, there are three things; which he calls *Idea, Ideatum, and Ideans*. *Idea* is the original image, (*Imago archetypa*), of the object of knowledge; *Ideatum* the conception, the product of the knowledge; and *Ideans* the producing instrument, the sense, the hand, the tongue.

To learn, is§ to proceed from something known, to the knowledge of something unknown; in which there are also three things, viz., the unknown, the known, and the mental effort to reach the unknown from the known.

* Meth. nov., 62.

† Ib., 67, 68.

‡ Ib., 94. This difficult passage is, in the original, "Scire est aliquid effigere posse; seu mente, seu manu, seu lingua. Omnia enim sunt effigando, seu imaginando, h. e. imagines et simulacra rerum effigendo. Nempe cum rem sensu percipio, imprimatur imago ejus cerebro. Cum similem efficio, imprimo imaginem ejus materiae. Quando vero id quod cogito, aut efficio, lingua enuntio, imprimo ejusdem rei imaginem aëri, et per aërem alterius auri, cerebro, meuti. Primo modo imaginari dicitur Scire, Wissen; secundo, et tertio posse imaginari, dicitur Scire, Können."

§ Ib., 95.

Every thing is to be learned by examples, rules and practice. Before the understanding, truth must be held up as the example; before the will, the good; and before the forming powers, the possible; and to this must be added practice, under the government of rules. Rules should not be given before examples. Artisans understand this well. None of them would give their apprentice a lecture upon his trade, but would show him how he, the master, went about it, and then would put the tools into his hands, and show him how to do the like, and to imitate himself.* Doing can only be learned by doing, writing by writing, painting by painting.

A second point† must not be undertaken until the first is learned; and, with the second, the first must be repeated.

Learning‡ is by steps, and proceeds from the easy to the difficult; from little to much; from the simple to the compound; from the nearer to the more distant; from the regular to the anomalous.

We first proceed toward knowledge by the perception and understanding of the present, and afterward go on from the present to the absent, by the information of others.§

Sight will supply the place of demonstration. It is good to use several senses in understanding one thing.¶ A thing is understood when one comprehends its inward nature as well as he does its outward nature, by his senses. To this inner conception are requisite a healthy, intellectual perception, a distinct subject, and deliberate consideration.¶

The attention should be fixed upon only one object at a time; and upon the whole first and the parts afterward.

By the understanding, are compared the original object and its representation. (*Ideatum cum idea.*)**

The memory has three offices; to receive, to retain, and to recollect.††

The subject to be apprehended must be clear, consistent, and orderly; the faculty to be directed to it must not be too full of impressions, which are liable to confuse each other; it must be calm, directed only to one thing, and that with love, (*animo affectuoso,*) or reverence.

Retaining will be made easier by repetition, extracts, etc.; recollecting by means of the inner relations of things.

The youngest must be instructed in visible things; pictures impress themselves upon their memory most firmly;‡‡ for these are suitable examples, copies, but not abstract rules.

* Meth. nov., 103, 129. † Ib., 106. ‡ Ib., 109. § Ib., 113. ¶ Ib., 114. ¶ Ib., 116.

** Ib., 120.

†† Ib., 121.

‡‡ Ib., 132.

The teacher should not be intellectually too quick; or if he be, let him learn patience.* Cicero says well, that the more skillful and intellectual the teacher is, the more irritably and impatiently will he teach; since it will annoy him to see his scholars slow in learning what he learned quickly.

The scholars who learn quickest are not always the best.†

The scholar's indolence must be made up by the teacher's industry.

Beginners must keep strictly to the copy; those more advanced may go on more independently of it; beginners must work slowly, and the more advanced faster and faster.

Whoever wishes to teach rapidly, must fasten his eyes at once upon his object, and go straight toward it, without regarding collateral points; must have all his instrumentalities ready at hand; and one and the same method for all studies; so that his scholars need not be required, at the same time, to undertake new matter and new forms.‡

Learning will become easy to the scholars, if their teacher manages them in a friendly manner, and according to the dispositions of each one; if he explains to them the object of their work; not only makes them look on a lesson, but take part in the work and conversation; and is careful to have a proper variety.§

To teach thoroughly|| are necessary, distinct, carefully chosen illustrations and copies, reliable rules, and persevering drill; solid foundations of knowledge, a judicious continuation of it, and completeness, examining and repetition. It is of especial importance that every scholar be made himself to teach. Fortius says that he learned much from his teachers, more from his fellow scholars, and most from his own scholars.¶

The school is a manufactory of humanity; it ought to work its subjects into the right and skillful use of their reason, speech and talents for occupation; into wisdom, eloquence, readiness, and shrewdness.

Thus will the teacher shape these little images of God, or rather fill up the outlines of goodness, power and wisdom impressed upon them by the divine power.**

The art of teaching is no shallow affair, but one of the deepest mysteries of nature and salvation.

X. UNUM NECESSARIUM.

As we have looked back upon the predecessors of Comenius, so we

* Meth. nov., 123. † Ib., 134. ‡ Ib., 139, &c. § Ib., 142, &c. || Ib., 145.

¶ Ib., 150. Saepe rogare; rogata tenere; retenta docere. Haec tria discipulum faciunt superare magistrum.

** Ib., 251

may look forward for a glance at his followers. Erasmus, Vives, Campanella, and especially Bacon, had, as we have seen, great influence upon him. A fifth stands in still closer relation to him, both in time and intellectual connection; namely, Wolfgang Ratich.* Many of Comenius' principles seem to have been taken from Ratich. Among these are, the recommendation of the natural method instead of the prevailing unnatural one, the insisting upon the study of the mother tongue, the rejection of punishment in instruction, the preference of practice over theoretical rules, the acquisition of a knowledge of substances before the analytical treatment of their accidents, &c. By a comparison of our descriptions of the characters of Ratich and Comenius, the reader will find still other similarities, and also important differences. Although, for example, both were Christians; Ratich was a decided adherent of the Lutheran confession, while Comenius' highest ideal was a union of all confessions. Ratich's method of teaching Latin is entirely different from Comenius'; for while the latter requires every scholar to be continually taking an active part in the instruction, Ratich makes the teacher only read, and imposes upon the scholar a Pythagorean silence.

The influence of Comenius upon later pedagogues, and especially upon the Methodians, is immeasurable. It is often difficult to judge whether they knew him, or in their own way discover the same things. In Rousseau, Basedow, and Pestalozzi, we shall find much that is entirely in agreement with Comenius, of which, however, I will not here anticipate my description. In the course of this history I shall have frequent occasion to mention this extraordinary man, for the reason that his works contain the germs of so many later developments.

Comenius is a grand and venerable figure of sorrow. Wandering, persecuted and homeless, during the terrible and desolating thirty years' war, he never despaired; but with enduring and faithful truth, labored unweariedly to prepare youth, by a better education, for a better future. His undespairing aspirations seem to have lifted up, in a large part of Europe, many good men, prostrated by the terrors of the times, and to have inspired them with the hope, that by a pious and wise system of education, there would be reared up a race of men more pleasing to God. Adolph Tasse,† a learned professor at Hamburg, writes: "In all the countries of Europe, the study of a better art of teaching is pursued with enthusiasm. Had Comenius

* Comenius, as we have related, applied to Ratich by letter, for information respecting the latter's method, but received no answer. He, however, knew Helwig's Report; and probably the *Methodus institutionis novæ Ratichii et Ratichianorum*, which appeared in 1626.

† Tasse, author of many mathematical works, died 1654. The letter seems to be dated, 1640. Opp. did., 1. 155.

attempted nothing more than to sow such a seed of suggestions in the souls of all, he would have attempted enough."

I have mentioned that Comenius wrote, in his 77th year, a Confession, from which we may become acquainted with his piety, his deep love, his unwearied aspirations to do good in the most various ways. The title of this book is, "The one thing needful to know; needful in life, in death, and after death, which the old man, Amos Comenius, weary with the uselessness of this world, and turning to the one thing needful for himself, in his 77th year, gives to the world to consider." I will conclude my description with an extract from this remarkable book.*

"I have described the universal labyrinth† of the human race; shall I now record my own errors? I would pass them over in silence, did I not know that there have been spectators of my deeds and of my sorrows; did I not fear to cause scandal by errors not repaired. But since God gives me a heart desirous of serving the common good, and has caused me to play a public part; and, since some of my actions have been blamed, I have thought it necessary to make mention of it, to the end that, although some have thought me, or still think me, a model of forwardness and gratuitous pains, they may see, by my example, how a man may err with the best intentions, and may learn, by my recollections, either to avoid the same, or, like me, to repair them. The apostle says, 'For whether we be beside ourselves, it is to God; or whether we be sober, it is for your cause.' This ought every true servant of God to apply to himself, so that if he has committed any error, he may confess it to God, and if he has learned to amend it, he may, as soon as possible, make use of his knowledge.

"I also thank God that I have, all my life, been a man of aspirations. And, although he has brought me into many labyrinths, yet he has so protected me that either I have soon worked my way out of them, or, he has brought me by his own hand, to the enjoyment of holy rest. For desire after good, if it is always in the heart, is a living stream that flows from God, the fountain of all good. The blame is ours if we do not follow the stream even to its source, or to its outflow into the sea, where is fullness and satiety of good. Yet, besides, by the goodness of God, who always brings us through the many errors of our labyrinths, by the sacred Ariadne's clue of his wisdom, in the end, back again into himself, the spring and ocean of all good.

* The Latin title of the book, which lies before me, is: "Unum necessarium in vita et morte et post mortem, quod non-necessarius mundi fatigatus et ad unum necessarium sese recipiens senex J. A. Comenius anno aetatis suae 77 mundo expendendum offert. Terent. Ad omnia aetate sapimus rectius. Edit Amstelodami 1666, nunc vero recusum Lipsiae 1734."

† In the beginning of the book he explains the story of the labyrinth of Minos, as an instructive picture of the manifold errors of man; hence the frequent references to it.

To me, also, this has happened; and I rejoice, that after so innumerable longings after better things, I have always been brought nearer to the end of all my wishes; since I see that all my doings hitherto have been the mere running up and down of a busy Martha, (yet from love to the Lord and his children!) or a change from running to rest. But now, at last, I lie with Mary at the feet of Jesus, and say, with David, 'This is my delight, that I believe in God?'

"One of my chief employments has been the improvement of schools; which I undertook, and continued for many years, from the desire to deliver the youth in the schools, from the difficult labyrinth in which they are entangled. Some have held this business foreign to the office of theologians; as if Christ had not connected together and given to his beloved disciple, Peter, at the same time, the two commands: 'Feed my sheep,' and, 'Feed my lambs!' To him, my everlasting love, I give everlasting thanks that he has put into my heart, and blest, such a love to his lambs, that things have turned out as they have. I hope and confidently expect it from my God, that my plans will come into life, now that the winter of the church is over, the rain has been heard, and the flowers are springing in the land; when God shall give to his flock shepherds after his own heart, who will feed not themselves, but the Lord's flock; and when the enmity which is directed against the living, shall cease, after their death.

"My second wearisome and difficult labyrinth was, my labors after peace; or my desire to unite together, if it should please God, the parties of Christians who were contending together over various articles of faith, in a most harmful manner; which effort cost me much pains. Upon this subject, I have not committed any thing to print; but may yet do it. That I have not published any thing, is by reason of the implacableness of certain people, whose furious hatred true friends thought it unadvisable for me to draw upon myself. But I will yet publish it, for, after all, we must fear God rather than men.* Our times have been like the experience of Elias upon Horeb, when he did not dare come forth from the cave, by reason of the storm-wind, the fire and the earthquake from before the Lord. But the time will come when Elias shall hear the still small voice, and shall recognize in it the voice of the Lord. To each one his own Babylon yet seems beautiful; and he believes it the very Jerusalem, which must give precedence to none, but all to it. It is called insolence, if any one, trusting in God and his own good purposes, dares to address himself to the whole world, and to admonish it to amendment. We

* This work remained unaccomplished, on account of his death.

are all assembled together upon the great theatre of the world, and what happens here or there concerns all. We are all one great family. By the same right by which one member of a family comes to another for help, ought we to be helpful to our fellow men. The whole of the Holy Scripture preaches love of our neighbor, and sound reason teaches the same. Socrates died, rather than not to teach goodness; and Seneca says, that if wisdom were to be given him for himself only, and he were not to communicate it to any other, he would rather not have it.

"Besides this, I fell, but, according to the will of God, into another strange labyrinth: in that I published the divine prophecies which have been accomplished down to our times, under the title, *Lux in tenebris, or e tenebris*. This brought upon me much pains and labor, and also much fear, enmity, and hate; and I was derided for my credulity. Although some of these prophecies may not come to fulfillment, I shall avoid, being angry thereat, as Jonah was, to his sorrow. For perhaps God has cause to change his purposes, or, at least, the revelation of them; perhaps he chooses thus to show that without him men know nothing; in order, at a future time to show what he can do without man, or by means of them, if he shall have brought them into accordance with his own will.

"Where shall I now begin, after so many labyrinths and Sisyphean stones, with which I have been played all my life? Shall I say with Elias: 'Now, Oh Lord, take away my life from me, since I am no better than my fathers;' or with David: 'Forsake me not, Oh Lord, in my age, until I shall have prophesied all that thine arm shall bring to pass.' Neither, that I may not be unhappy with painful longing for the one or the other; but I will have my life and death, my rest, and my labor, according to the will of God; and with closed eyes will follow wherever he leads me, full of confidence and humility, praying, with David: 'Lead me in thy wisdom, and at last receive me into glory.' And what I shall do hereafter, shall happen no otherwise than as if directed for me by Christ, so that the longer I live the more I may be contented with what is needful for me, and may burn up or cast away all that is unnecessary. Would that I were soon to depart to the heavenly country, and leave behind me all earthly things! Yea, I will cast away all the earthly cares which I yet have, and will rather burn in the fire, than to encumber myself further with them.

"To explain this, my last declaration, more clearly, I say that a little hut, wherever it be, shall serve me instead of a palace; or if I have no place where to lay my head, I will be contented after the example

of my master, though none receive me under his roof. Or I will remain under the roof of the sky, as did he during that last night upon the Mount of Olives, until, like the beggar Lazarus, the angels shall receive me into their company. Instead of a costly robe, I will be contented, like John, with a coarse garment. Bread and water shall be to me instead of a costly table, and if I have therewith a few vegetables, I will thank God for them. My library shall consist of the threefold book of God; my philosophy shall be with David, to consider the heavens and the works of God, and to wonder that He, the Lord of so great a kingdom, should condescend to look upon a poor worm like me. My medicine shall be a little eating and frequent fasting. My jurisprudence, to do unto others as I would that they should do unto me. If any ask after my theology, I will, like the dying Thomas Aquinas—for I, too, shall die soon—take my Bible, and say with tongue and heart, ‘I believe what is written in this book.’ If he asks further about my creed, I will repeat to him the apostolical one, for I know none shorter, simpler, or more expressive, or that cuts off all controversy. If he ask for my form of prayer, I will show him the Lord’s Prayer; since no one can give a better key to open the heart of the father than his only son, his own offspring. If any ask after my rule of life, there are the ten commandments; for I believe no one can better tell what will please God than God himself. If any seek to know my system of casuistry, I will answer, every thing pertaining to myself is suspicious to me; therefore I fear even when I do well, and say humbly, ‘I am an unprofitable servant, have patience with me!’

“But what will admirers of earthly wisdom say to this? they will, no doubt, laugh at the old fool, who, from the highest pinnacle of his honors, falls to the lowest self-abasement. Let them laugh, if it pleases them; my heart will also laugh, that it has escaped from error. ‘I have found the harbor, farewell fate and accident!’ says the poet. I say, I have found Christ; depart, ye vain idols! He is all to me. His footstool is more to me than all the thrones of the earth, and his lowliness more than all grandeur. It seems to me that I have found a heaven below the heavens, since I see more clearly than of old the footsteps of this guide toward heaven. To follow these footsteps without departing from them, will be my surest way to heaven. My life here was not my native country, but a pilgrimage; my inn was ever changing, and I found nowhere an abiding resting place. But now I see my heavenly country near at hand, to whose gates my Leader, my Light, my Saviour, who has gone before, to prepare a place for me in his father’s house, has brought me. He

will soon come to take me to be where he is. Yea, Lord Jesus, I thank thee, thou beginner and finisher of my faith, who hast brought me, a foolish wanderer, straying a thousand ways from the direction of my journey, diverted and delayed in a thousand by-occupations, so far that now I see before me the bounds of the promised land, and have only to cross the Jordan of death, to attain even unto thy loveliness. I praise and glorify thy holy wisdom, O my Saviour, that thou hast given me on this earth no home; but that it has been for me only a place of banishment and pilgrimage; and I can say with David, 'I am thy pilgrim and thy citizen.' I can not say, like Jacob, 'My days are few, and they attain not unto the days of my fathers,' for thou hast caused it to come to pass that they surpass the days of my father and my grandfather, and many thousands who have passed with me through the desert of this life. Why thou hast done this, thou knowest. I commit myself into thine hands. Thou hast always sent an angel unto me, as unto Elias in the desert, with a morsel of bread and a draught of water, that I should not die of hunger and thirst. Thou has preserved me from the universal foolishness of men, who always mistake pleasure for real good; the road for the destination; striving after rest; the inn for a home; and pilgrimage for their country; but me hast thou led, and even forced, to thy Horeb. Blessed by thy holy name!"

PEDAGOGICAL WORKS OF COMENIUS.

1. *JANUA LINGUARUM RESERATA AUREA SIVE SEMINARIUM LINGUARUM ET SCIENTIARUM OMNIUM*, hoc est, compendiosa Latinam (et quamlibet aliam) linguam, una cum scientiarum artium que omnium fundamentis, perdiscendi methodus, subtilis centum, periodicis mille comprehensa. Editio postrema, prioribus castigatior et mille circiter vocabulis auctior, cum versione Germanica et Gallica, abso-lutissimoque titulorum et vocum indice. Amstelodami apud Joannem Janssoni-um. 1642.

I am not acquainted with the first edition. Comenius' preface is signed with "Scribebam in exilio 4 Martii. 1631."

2. *PHYSICÆ AD LUMEN DIVINUM REFORMATÆ SYNOPSIS*. Lipsie, 1633.

3. *ORBIS SENSUALIUM PICTUS*, hoc est omnium fundamentalium in mundo re-rum et in vita actionum, pictura et nomenclatura. Editio secunda, multo emacu-latior et emendatior. Noribergæ typis et sumptibus Michaelis Endteri, 1659. The visible world; that is, the representation and names of all the principal things of the world and occupations of life.

I am unacquainted with the first edition. Of the later ones, I have an *Orbis Pictus Quadrilinguis*, in Latin, German, Italian, and French, which was edited by Coutelle and published by Endter, in 1755.

4. *OPERA DIDACTICA OMNIA*, variis hucusque occasionibus scripta, diversis que locis edita, nunc autem non tantum in unum, ut simul sint, collecta, sed et ultimo conatu in systema unum mechanice constructum, redacta. Amsterdami impensis D. Laurentii de Geer excederunt Christophorus Conradus et Gabriel a Roy. Anno, 1657. 4 vols., folio.

Volume I. contains the following, written between 1627 and 1642:

1. De primis occasionibus quibus huc studiorum delatus fuit author, brevissima relatio.

2. *Didactica Magna*. Omnes omnia docendi artificia exhibens.

3. *Schola materni gremii*, sive de provida juventutis primo sexennio educatione.

4. Scholae vernaculae delineatio.
5. Janua Latinae linguae primum edita. (The first edition of the Janua.)
6. Vestibulum ei praestructa.
7. Proplasma templi Latinitatis Dav. Vechneri.
8. De sermonis Latini studio.
9. Prodomus Pansophiae.
10. Variorum de eo censurae, &c.

Volume II. contains treatises written from 1642 to 1650; especially those of his Swedish engagement, viz.:

1. De novis didactica studia continuandi occasionibus.
2. Methodus linguarum novissima.
3. Latinae linguae vestibulum, rerum et linguae cardines exhibens.
4. Januae linguarum novissimae clavis, grammatica Latino-vernacula.

Volume III. contains treatises written by Comenius in Hungary, from 1650 to 1654, viz.:

1. De vocatione in Hungariam relatio.
2. Scholae pansophicae delineatio.
3. De repertis studii pansophici obicibus.
4. De ingeniorum cultura.
5. De ingenio colendi primario instrumento, libris.
6. De reperta ad autores Latinos prompte legendos et clare intelligendos facili, brevi, amoenaeque via.
7. Eruditionis scholasticae pars I. Vestibulum, rerum et linguae fundamenta ponens.
8. Eruditionis scholasticae pars II. Janua rerum et linguarum structuram externam exhibens. This includes
 - a. Lexicon januale.
 - b. Grammatica janualis.
 - c. Janualis rerum et verborum contextus, historiolarum rerum continens. This is a revision of the Janua reserata, in one hundred chapters and one thousand paragraphs, as in the first edition.
9. Eruditiones scholasticae pars III. Atrium, rerum et linguarum ornamenta exhibens. This is, like the Janua, in one hundred chapters and one thousand paragraphs, but one grade above it.
10. Fortius redivivus, sive de pellenda scholis ignavia.
11. Praecepta morum in usum juventutis collecta. Anno 1653.
12. Leges bene ordinatae scholae.
13. Orbis Pictus. Merely a sort of announcement of the work.
14. Schola ludus; hoc est, Januae linguarum praxis comica. This is, substantially the contents of the Janua linguarum in the form of a dialogue.
15. Laborum scholasticorum in Hungaria obitorum coronis. An educational address delivered at his departure from Patak, in 1654.

Volume IV. includes the treatises written by Comenius in Amsterdam, up to the year 1657, viz.:

1. Vita gyryus, sive de occasionibus vitae et quibus autorem in Belgium deferri, iterumque ad intermissa didactica studia redire contigit.
2. Parvulis parvulis, omnibus omnia, hoc est, Vestibuli Latinae linguae auctarium, voces primitivas in sententias redigens.
3. Apologia pro Latinitate Januae linguarum.
4. Ventilabrum sapientiae, sive sapienter sua retractandi ars.
5. E scholasticis labyrinthus exitus in planum, sive machina didactica mechanice constructa.
6. Latium redivivum, hoc est, de forma erigendi Latinissimi collegii, seu novae Romanae civitatulae, ubi Latina lingua usu et consuetudine addiscatur.
7. Typographum vivum, hoc est; arcom pendiosae et tamen copiosae ac eleganter sapientiam non chartis sed ingeniis imprimendi.
8. Paradisus juventuti Christianae reducendus, sive optimus scholarum status, ad primae paradisiacae scholae ideam delineatus.
9. Traditio lampadis, hoc est studiorum sapientiae Christianaeque juventutis et scholarum, Deo et hominibus devota commendatio.
10. Paralipomena didactica.

It may be added, that Comenius revised an edition which appeared in 1661, of the *Theologia naturalis sive liber creaturarum* of Raymundus de Sabunde.

XVII. EDUCATIONAL MISCELLANY AND INTELLIGENCE.

ON THE EFFECTS OF INITIAL GYRATORY VELOCITIES, AND OF RETARDING FORCES, ON THE MOTION OF THE GYROSCOPE.

BY MAJOR J. S. BARNARD, A. E.

Corps of Engineers, U. S. A.*

In one of the concluding paragraphs of my first paper on the Gyroscope (Am. Journal of Education, June, 1857,) I stated that "an initial impulse may be applied to the rotating disk in such a way that the horizontal motion shall be absolutely without undulation. An initial angular velocity such as would make its corresponding deflective force equal to the component of gravity $g \sin \theta$, would cause a horizontal motion *without* undulation."

The statement contained in the last sentence quoted, is not rigidly true; for *besides* the component of gravity, there is another force to be considered, viz., the centrifugal force due to the gyratory velocity, which acts either in conjunction with, or in opposition to, the component of gravity, according as the axis of the disk is above or below a horizontal.

In this last position this force is null (as regards its effects in sustaining or depressing the axis), and to *this* angular elevation of the axis the statement quoted is true without qualification. The assumption of an initial horizontal velocity requires only a new determination of constants for equations (a) and (c) (pp. 541, 542, June No.).

If we make, in those equations

$\theta = \alpha$, $\varphi = 90^\circ$, $\psi = 90^\circ$, $a = -\sin \alpha$, $v_x = m$, $v_y = 0$, $v_z = n$,
(in which m is the assumed initial velocity) and determine the constants h and l therefrom, the equations of motion will become

$$\left. \begin{aligned} \sin^2 \theta \frac{d\psi}{dt} &= \frac{Cn}{A} (\cos \theta - \cos \alpha) + m \sin \alpha \\ \sin^2 \theta \frac{d\psi^2}{dt^2} + \frac{d\theta^2}{dt^2} &= \frac{2Mg\gamma}{A} (\cos \theta - \cos \alpha) + m^2 \end{aligned} \right\} \quad (1)$$

and from them we get

$$\sin^2 \theta \frac{d\theta^2}{dt^2} = \left[\frac{2Mg\gamma}{A} \sin^2 \theta - \frac{2Cmn}{A} \sin \alpha - \frac{C^2 n^2}{A^2} (\cos \theta - \cos \alpha) - m^2 (\cos \theta + \cos \alpha) \right] (\cos \theta - \cos \alpha) \quad (2)$$

From this we get $\frac{d\theta}{dt} = 0$ when $\cos \theta - \cos \alpha = 0$; and as $\frac{d\psi}{dt}$ is not zero for this initial elevation, it indicates, instead of a cusp, a tangency to the horizontal here.

* This paper is intended to give a more rigidly mathematical demonstration of the effects of "retarding forces" than is given in (December No. p. 529,) of this Journal; and to give the theory of the "motions" of the Gyroscope a more general form, by the introduction of "Initial Gyratory Velocities."

If the curve described is horizontal without undulation, the other factor of the second member of eq. (2) should likewise become zero with $\theta = \alpha$: an effect which may ensue from a suitable value given to m .

The value of the deflecting force due to a given angular velocity m is (p. 552, June number) $\frac{C}{\gamma M} m n$, and if we suppose this equal to the component of gravity $g \sin \alpha$, we shall have $m = \frac{M g \gamma}{C n} \sin \alpha$.

If we substitute this value of m in the second member of equation (2) and assume $\alpha = 90^\circ$ the factor in question becomes zero for $\theta = \alpha$, and the maximum and minimum values of θ are the same, indicating a horizontal motion without undulation.

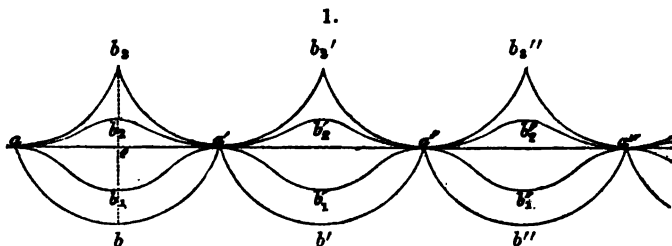
For every other initial elevation than 90° a different value of m is required to produce this result, in consequence of the influence of the centrifugal force of gyration at other elevations.

With $\alpha = 90^\circ$, equation (2) becomes

$$\sin^2 \theta \frac{d\theta^2}{dt^2} = \left[\frac{2 M g \gamma}{A} \sin^2 \theta - \frac{2 C m n}{A} - \frac{C^2 n^2}{A^2} \cos \theta - m^2 \cos \theta \right] \cos \theta \quad (3)$$

Placing the first factor of the second member equal to zero and solving with reference to $\cos \theta$ we get (recollecting the value given to β in our former article)

$$\cos \theta = -\beta^2 - \frac{A m^2}{4 M g \gamma} + \sqrt{\left(\beta^2 + \frac{A m^2}{4 M g \gamma} \right)^2 + 1 - \frac{C m n}{M g \gamma}}. \quad (4)$$



For $m = 0$, equation (3) expresses the cycloidal curve with cusps $a, a',$ &c., as has been already shown in our former investigation. For $m > 0$ but $< \frac{M g \gamma}{C n}$ the minimum value of θ derived from equation (4) is greater than when m is zero, while instead of a cusp (there is as has already been observed) a tangency at a , and the curve has the wave form $a b_1 a' b'_1$ (the points $b_1 b'_1 b''_1$, &c. being higher than $b b' b''$).*

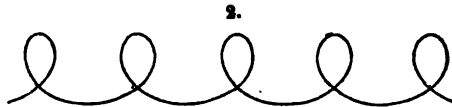
When $m = \frac{M g \gamma}{C n}$ the curve unites with the horizontal $a a' a'' a'''$ and there is no undulation; equation (4) giving $\cos \theta = 0$, or $\theta = 90^\circ$.

* In reality, the amplitudes, $a a', a' a''$, of the undulations become increased, at the same time that the sagittas are diminished, but, for the sake of comparison, I have represented them the same for each variety of curve.

When $m > \frac{Mg\gamma}{Cn}, \frac{d\theta}{dt}$ becomes still zero with $\theta = \alpha = 90^\circ$; but this instead of a maximum is now a *minimum* value of θ , for the value of θ which satisfies equation (4) is greater than 90° , and the curve $ab_2 a'b_2'$, &c., undulates *above* the plane $a'a''$.

Finally when $m = \frac{2Mg\gamma}{Cn}$, equation (4) will give $\cos \theta = -\frac{1}{2\beta^2}$ and a substitution of this in the first equation (1) (making $\alpha = 90^\circ$), will give $\frac{d\psi}{dt} = 0$: showing that the curve makes cusps at its superior culminations, and that the common cycloidal motion is resumed. In fact the value of $\frac{d\psi}{dt} = \frac{1}{\beta} \sqrt{\frac{g}{\lambda}}$ (p. 547, June number) at the *lowest* point b of the cycloid, is, (substituting the values of β and λ) exactly equal to $\frac{2Mg\gamma}{Cn}$, and the value of the sagitta u corresponding to eb is what we have just found for $\cos \theta$, or eb_2 , viz. $\frac{1}{2\beta^2}$.

If now, retaining m constant at this value to which we have brought it, we increase the rotary velocity, n , or vice versa, a curve *with loops*, (fig. 2,) may be described, as it can be shown that, for the maximum value of θ , $\frac{d\psi}{dt}$ becomes negative.*



In my supplementary paper in the December number of this Journal I have endeavored to show how the theoretical cycloidal motion of a simple solid of revolution is modified by the retarding forces of friction and the resistance of the air, and that the theory explains all the phenomena observed in the ordinary gyroscope.

It may be objected however that the nature of the curve given in Fig. 1, (p. 531,) is in some degree *assumed*, and I therefore wish to show that it can be confirmed by mathematical demonstration.

The rotary velocity n of the disk is supposed to be gradually destroyed through the retarding forces of friction at the extremities of the axle, and of the resistance of the air at the surface.

Without attempting to give analytical expressions for the retarding forces, it is sufficient to say that the rotary velocity, at the end of any

* If m is made *negative* and small (i. e., a *backward* initial velocity given) a looped curve like the above, but lying *below* the plane $a'a''$, results. All these curves (n being always supposed very great) are but the different forms of the "cycloid" known as *prolate*, *common*, and *curtate* cycloids; the common—a *particular* case of the curve—corresponding to the *particular* case of the problem in which the initial gyrotory velocity is either zero or has the *particular value* $\frac{2Mg\gamma}{Cn}$.

time t , counting from the commencement of motion, may be expressed thus

$$n - f(t)^*$$

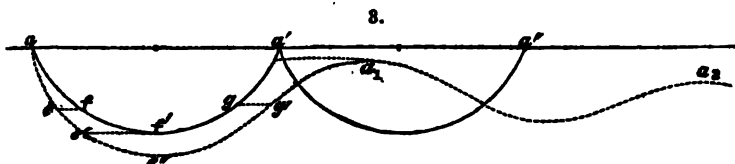
in which n is the initial rotary velocity of the disk.

If we substitute this expression for v_z in the last two equations (3) (p. 541, June No.,) and follow a similar process to that by which equations (4) of that paper are deduced, we shall get, for the equations of motion

$$\left. \begin{aligned} \sin^2 \theta \frac{d\psi}{dt} &= \frac{Cn}{A} (\cos \theta - \cos \alpha) - \frac{C}{A} \int_0^t f(t) d. \cos \theta \\ \sin^2 \theta \frac{d\psi^2}{dt^2} + \frac{d\theta^2}{dt^2} &= \frac{2Mg\gamma}{A} (\cos \theta - \cos \alpha) \end{aligned} \right\} \quad (5)$$

For the sake of simplicity suppose the initial position of the axis be horizontal, or $\alpha = 90$ and the above become

$$\left. \begin{aligned} \sin^2 \theta \frac{d\psi}{dt} &= \frac{Cn}{A} \cos \theta - \frac{C}{A} \int_0^t f(t) d. \cos \theta \\ \sin^2 \theta \frac{d\psi^2}{dt^2} + \frac{d\theta^2}{dt^2} &= \frac{2Mg\gamma}{A} \cos \theta \end{aligned} \right\} \quad (6)$$



If $a f f' a''$ represents the cycloidal curve, and $a e e' e'' g''$ the curve in question, it will be observed that the angular velocity of the axis given by the 2nd equation (6) is the same for both, for equal values of θ , while the value of the horizontal component of that velocity, $\sin \theta \frac{d\psi}{dt}$, is less

than for the cycloidal curve, by the term $\frac{C}{A \sin \theta} \int_0^t f(t) d. \cos \theta$.

As θ diminishes, $d \cos \theta$ is positive and this term is subtractive and hence for any point e or e' on the descending branch, $\frac{d\psi}{dt}$ is less than for the corresponding point f or f' of the cycloid, and the branch $a e e' e''$ will be behind the branch $a f f'$, and will descend lower.

At e'' the term $\frac{C}{A \sin \theta} \int_0^t f(t) d. \cos \theta$, attains its maximum, for as the curve ascends, θ increases, and the increments of $\cos \theta$ become negative.

* When the retarding force is independent of the velocity, as in the case of friction, the $f(t)$ in the above expression is linear; when this force is dependent upon the velocity, as for the resistance of the air, $f(t)$ will, in general, be an infinite and diverging series in the powers of t ; whether the force is due to either, or both combined, of these causes, the above expression for the velocity of rotation may however be used for the present purpose.

But as the values of t on this branch of the curve are nearly double those or equal values of θ of the descending one, the integral $\int_0^t f(t) d.\cos\theta$ will become zero at some point g' , before θ has regained its initial value, at which point $\frac{d\psi}{dt}$ will be the same as for the corresponding point g of the cycloid. Above the point g' the term $-\frac{C}{A\sin\theta} \int_0^t f(t) d.\cos\theta$ becomes negative and (with its negative sign) becomes additive and therefore, above g' the values of $\frac{d\psi}{dt}$ are always greater than for corresponding points of the cycloid. Hence the angular velocity of the axis can never become zero and consequently the axis cannot rise to its initial elevation and form a cusp, but must make an inflexion and culminate at a , below the initial elevation.

Commencing a second descent from a' with an initial velocity, the succeeding wave will be flattened (as shown in treating the subject of "initial gyratory velocities"), the second culmination a_2 will not (as a similar train of reasoning to that just gone through for the first undulation proves) be as high as a_1 : and *pari ratione*, each succeeding wave will be more flattened and extended than the preceding, until they soon virtually disappear, and the curve becomes a descending helix.

After these undulations have disappeared, as the descent is only due to loss of rotary velocity (and consequently loss of *deflecting force*) measured by $f(t)$, it is evident that the future character of the helix will be determined by this function.

In fact, as the descending velocity $\frac{d\theta}{dt}$ is then very minute compared with the horizontal velocity $\frac{d\psi}{dt}$, its square may be neglected in the 2nd equat., (6); and, equating the values of $\sin\theta \frac{d\psi}{dt}$ deduced from these two equations, we shall have

$$\frac{C}{A} \int f(t) d.\cos\theta = \frac{Cn}{A} \cos\theta - \sin\theta \sqrt{\frac{2Mgy}{A} \cos\theta}.$$

By differentiating both members and making various reductions we get

$$\sqrt{\frac{Mgy}{A}} \cdot \frac{3\sin^2\theta - 2}{\sqrt{\sin\theta \sin 2\theta}} = \frac{C}{A} (n - f(t))$$

an equation which, after the disappearance of the undulations, gives the value of θ in terms of t .

As $f(t)$ increases θ diminishes in the first member, to the limit corresponding to $\sin^2\theta = \frac{2}{3}$ which makes the numerator of the fraction in the first member 0, and the denominator a maximum; showing, to that limit, a constant descent of the axis, or a descending helix for the curve.

As the values of $f(t)$ beyond $f(t) = n$ do not belong to the question, there can be no farther descent below that value of θ which reduces the first member to zero; or beyond $\sin^2\theta = \frac{2}{3}$.

At this elevation, as the *deflecting force* has vanished entirely with the rotary velocity, it is evident the elevation of the axis must be maintained by the *centrifugal force alone*, due to the gyratory velocity.

In fact, if we calculate directly the angle to which the axis must fall from a horizontal position, in order that the velocity generated shall be just sufficient, if deflected into horizontal gyration, to exert a centrifugal force adequate to maintain it, we shall find this same value, $\sin^2 \theta = \frac{1}{3}$.*

In reality, the air resists gyration as well as rotation, and hence the descent will continue; but if a gyroscope could be placed in a *perfect vacuum*, and the slight friction at the point of support be entirely annulled, the axis would descend in a helix until it reached this limit, at which it would forever gyrate, though the rotation of the disk would soon by friction of the axle, entirely cease.

* If the solid of revolution is of dimensions so small that it may be considered concentrated in its centre of gravity, it would require, in the fall of its axis through angle $90^\circ - \theta$, the velocity $\sqrt{2g\gamma \cos \theta}$; and this velocity, deflected into horizontal gyration in a circle whose radius is $\gamma \sin \theta$, would create a centrifugal force $2g \frac{\cos \theta}{\sin \theta}$,

whose component normal to the axis of figure is $2g \frac{\cos^2 \theta}{\sin \theta}$. Equating to this the opposing component of gravity $g \sin \theta$, we get $\sin^2 \theta = \frac{1}{3}$, as in the text.

For finite dimensions of the solid, the direct determination of the limit in question, is more complicated, and it is scarcely necessary to introduce it here.

ART EDUCATION.

[The following communication from our correspondent, M. A. DWIGHT, contains important suggestions in reference to the study of Art.—Ed.]

MR. EDITOR.—Professor Dana, in his communication published in your Journal, (No. 12, p. 289,) wishes to correct my "misapprehension" of his opinions advanced in his address, (No. 10, p. 294, of the same work.)

Allow me to say in reply, that I think no "misapprehension" exists, and that the point of difference between us lies, in the fact, that each one entertains opinions on the same subject remotely opposite from the other. Professor Dana says, "the ancients had, it is true, built magnificent temples. But the taste of the architect and that of the statuary or poet, is simply an emanation from the divine breath within man, and is cultivated by contemplation, and only surface contact with nature." I think, on the contrary, that all true art has its foundation in science. In order to correct my "misapprehension" of him, he says, "I was aiming to show, that the ancients had not pursued the study of nature far enough to arrive at any of the profound laws which make the foundation of modern science, and I spoke of their proficiency in architecture and sculpture, as no evidence of such knowledge, as it reached its state of perfection without it."

The educated world acknowledge that the ancient Greek temples are models of architecture, and architects have ever made them a study, endeavoring, if possible, to master the scientific principles on which they were constructed. And that the ancient statues could exhibit such truth to nature, both in form and expression, argues a most profound knowledge of the science of anatomy. If Professor Dana doubts this, let him take the anatomical plate prepared by Fau for the study of artists, exhibiting the muscular development in the statue of the Laocöon, and compare it with the statue itself, and he can not fail to be convinced that the sculptors of that wonderful group have proved their knowledge of the science of anatomy beyond question, and had also obtained "a deep insight into the profound laws which make the foundation of modern science." It is said of Benjamin West, that when he first saw the Apollo Belvedere, he exclaimed, "How like a Mohawk warrior!" He then described to the bystanders, their education, their dexterity with the bow and arrow, the admirable elasticity of their limbs, how much their life expands the chest, while the quick breathing of their speed in the chase dilates the nostrils with that apparent consciousness of vigor which is so nobly depicted in the Apollo. "I have seen them often," added he, "standing in that very attitude, and pursuing with an intense eye, the arrow which they had just discharged from the bow." The Italians present admitted that a better criticism of the merits of the statue had rarely been given." (*Gall's Life of West*.) Could this "immortal statue," which is considered the model for students in sculpture have been produced by any artist who had had "only surface contact with nature?" Does not the term art imply the necessity for a combination of knowledge and skill in addition to the "emanation from the divine breath within man and a surface contact with nature?"

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Professor Dana also says, "it will show our appreciation of Miss Dwight's views, when we say, that our scheme of a 'Scientific School,' printed before that address was delivered, included a Professor of Drawing, (in all its departments,) another of Architecture, another of *Æsthetics* or the History and Criticism of Art, and this we regarded as merely an initial step toward a wider expansion of the Art department. These topics were associated with the various sciences, so that the art student, according to the contemplated plan, would have an opportunity to acquire that comprehensive acquaintance with modern science which is necessary to equip him for his best and highest efforts." Allow me here to repeat the question already given, why should art be included as one of the pursuits in a Scientific School, if science is entirely superfluous to the pursuit of it,—as it must certainly be, if Professor Dana is correct in his opinion that "ancient architecture and sculpture reached its state of perfection without it?" Nothing can be carried further than "a state of perfection," therefore "the profound laws which make the foundation of modern science," and which the ancients are supposed "not to have reached," could add nothing to the improvement of those arts. Professor Dana in his plan for a scientific school, includes among his corps of professors, one of *Æsthetics* or the History and Criticism of Art? Modern Art certainly furnishes no subjects for scientific discussion, and if ancient sculpture and architecture "are the result of contemplation and surface contact with nature," what occasion have they for such a professor, as in that case there can be no established principles for him to inculcate, and in criticising works of art, he can have no criterion of merit.*

If the Professor of Drawing at the New Haven Scientific School agrees in opinion with Professor Dana, the scholars there, are, to say the least, in danger of being misled, and we again repeat the opinion already expressed, that if other scientific schools will give prominence to the study of art, "Yale like other shaded plants will begin to dwindle, and her laurels fade." By the term ART we do not mean surface work, but art having for its basis scientific principles founded in the immutable laws of nature. Pursued on this basis the study is ennobling, and elevating, and expands the whole mental capacity; but as mere surface work, it is as unsatisfactory and as unprofitable for all purposes of education, as the most mechanical employment. Those who would take any pleasure in it, or prefer it to the true and better way, would enjoy the music of a hand organ more than the finest concert of instruments and voices. To excel in sculpture and architecture scientific knowledge is indispensable. True, modern artists do not acknowledge this, but do they excel? Most of their works are, at best, but an imitation of the antiques which were produced by the aid of scientific knowledge, and without these models, how would they know where to begin their work? A student who is familiar with general literature will detect the plagiarisms of authors, and those who have studied ancient art, will detect the plagiarisms of artists, as well as the blunders that betray their want of artistic education. If the sculptor of the Beatrice Cenci, had had the training that all artists require, she would not have been so mistaken in the choice of her subject, which is not one for sculpture, because that art being limited to the repre-

* My limits do not admit of extracts, and I refer Professor Dana to "Winckelman's History of Ancient Art," also "Goethe's Essays on Art." Fuseli's Lecture on Ancient Art, and those of other artists, Richardson, Barry, Reynolds, Hayden, etc. I think he will find the various authors of these works believed that the ancient artists worked on scientific principles derived from the study of nature.

sentation of form, requires that the subject chosen should be faultless both in form and proportion, to which a healthful constitution of mind and of body are essential. If in representing Beatrice, the artist is true to this requirement of the art of sculpture, and gives a perfect form, she must contradict the character chosen, or rather the circumstances that envelop it with interest. If Beatrice were destitute of sensibility, she could excite no interest. If, on the contrary, she had sensibility, she could not have escaped severe suffering, and suffering will have its effect on the physical frame. Indeed that is nature's index of the life within, and the one which we naturally make the criterion of our judgment. Therefore Beatrice Cenci is not a subject for the chisel, but for the pencil, and Guido has proved by his world renowned picture, that history furnishes none more exquisite. The painter may choose the most ethereal subject, for the pictorial art represents form by means of light and shade and color, and the form, wasted by severe mental suffering, may, in that art, be so represented as to excite the liveliest and tenderest sympathy for the sufferer, and at the same time avoid all that is repulsive. In the art of sculpture this is impossible. Ancient sculpture, in the famous statue of Niobe, furnishes one fine example of this class, but the subject of that, according to fable, was, from a state of joyous exultation changed at once to stone, thus preserving in the form the fullness of life and health. In the Beatrice, the choice of subject is not the artist's only mistake. The anatomy of the figure is exceedingly faulty. The body above the hips is flat, and the natural angle of the left shoulder entirely wanting. The deficiency of these parts makes the thigh appear disproportionately large. The attitude is a matter of taste. Let the reader contrast it with the grace of the sleeping Ariadne. We accept Guido's representation of Beatrice Cenci, and can associate with it a gentle, sensitive girl, driven by desperation to crime, and then suffering till wasted to the shadow of her former self. But this block of marble—whose heart has it touched?

The artists have lately proposed the formation of a National School of Art. This is just what should be done, and if they will found a school that will be as thorough in all departments of instruction as that of the Carracci, it will be the greatest move of the nineteenth century in the cause of education. This brings the question, where are the teachers who are capable of establishing such a school? What have the Schools of Design, so called, accomplished for the promotion of art?—or, for "suffering needle-women," charity for whom was the ostensible object of the movement? Since their establishment, there has been no great advance in any art,—no important teachers furnished, and the demand on the benevolent for "poor seamstresses" seems not at all diminished. A successful and useful school of art may be founded and perpetuated as well as a collegiate institution, provided the plan and object are the same, viz., thorough and scientific instruction to all scholars, geniuses included, requiring them to go to the root of the matter, as is done in the studies pursued at college. This plan, and no other, will make a school of art successful. The false idea, that genius is all-sufficient, and that great works are the result of inspiration, is the rock on which true art has been wrecked. Every one, no matter what his native ability may be, if he would attain complete success, must have a thorough knowledge of the rules and principles that govern the practice of art. The works that are produced by each one so educated, will show who has talent and who has genius, for "genius plays and talent labors," but the guide of the play and the labor must be, the absolute laws of art. If left to fancy, the productions of the

so-called artist, will have their day, like the fashion of the hat he wears, and then be laughed at and shoved aside for something more pleasing to the prevailing taste of another time. Let any one inform himself of the rules of sculpture and painting, and then study those works of art called "immortal," and he can not fail to see the true reason for their being the delight of successive generations. And, if he will go further, and analyze the reason for this, he will find that the philosophy of it lies in the fact, that their authors were guided wholly by that great and true teacher, nature. The Creator in his wisdom formed us with certain tastes designed to promote our pleasure, and then for their gratification created the wonderful beauties of nature in their infinite variety, and so long as the world exists, the one will correspond to the other. Guided by this beautiful law of adaptation, the ancient artists studied nature, learned her laws, and in obedience to her teachings produced works that will never fail to gratify the natural tastes of man to the end of time. Knowing that the ancients were students of nature, the young artist is told to study nature. But he does not know how to study her. A student in astronomy might, with the same propriety, be told to look at the stars and learn that science without guide or teacher. In each case, he needs the benefit of the observations and study of those who have preceded him in the same paths for centuries. Again, the young artist is sent to Italy to copy pictures, and what does he acquire then but "surface contact?" True, his taste may have become cultivated, but he has learned nothing of principles, and has nothing to guide him in his efforts at original composition.

The books that are universally read and accepted as authority, are considered an index of the state of the mental progress and cultivation of the time, and judging from the popularity of Ruskin's works, so far as art is concerned, the present day may be considered as the second period of the dark ages. In the preface to his "Elements of Drawing," he says:—

"One task, however, of some difficulty, the student will find I have not imposed upon him: namely, learning the laws of perspective. It would be worthwhile to learn them if he could do so easily; but, without a master's help, and in the way perspective is at present explained in treatises, the difficulty is greater than the gain. For perspective is not of the slightest use, except in rudimentary work. You can draw the rounding of a table in perspective, but you can not draw the sweep of a sea bay; you can fore-shorten a log of wood by it, but you can not fore-shorten an arm. Its laws are too gross and few to be applied to any subtle form; therefore, as you must learn to draw the subtle forms by the eye, certainly you may draw the simple ones. No great painters ever trouble themselves about perspective, and very few of them know its laws; they draw every thing by the eye, and naturally disdain in the easy parts of their work, rules which can not help them in the difficult ones. It would take about a month's labor to draw imperfectly by laws of perspective, what any great Venetian will draw in five minutes, when he is throwing a wreath of leaves around the head, or, bending the curves of a pattern in and out among the folds of drapery. It is true that when perspective was first discovered, every body amused themselves with it, and all the great painters put fine saloons and arcades behind their madonnas, merely to show that they could draw in perspective; but even this was done by them only to catch the public eye, and they disdained the perspective so much, that though they took the greatest pains with the circlet of a crown, or the rim of a crystal cup, in the heart of their picture, they would twist the capitals of their columns and towers of churches about in the back-

ground in the most wanton way, wherever they liked the lines to go, provided only they left just perspective enough to please the public. In modern days, I doubt if any artist among us, except David Roberts, knows so much perspective as would enable him to draw a gothic arch to scale at a given angle and distance. Turner, though he was professor of perspective in the Royal Academy, did not know what he professed, and never, so far as I remember, drew a single building in true perspective in his life. He drew them only with as much perspective as suited him. Prout also knew nothing of perspective, and twisted his buildings as Turner did, into whatever shapes he liked. I do not justify this, and would recommend the student at least to treat perspective with common civility, but to pay no court to it."

In the first place, leaving out perspective in a book of instruction for "beginners," which carries them on to composition, is like leaving out the multiplication table in an arithmetic, or like saying, that the rules of time are of no importance in the study of music; they are well enough, but if you can sing or play by the ear, it will answer all purposes. Why could not Ruskin speak the honest truth, and say, that he was perfectly ignorant of perspective, and incapable of giving them one single rule for it, and was, therefore, obliged to leave it out of his book? In the next place, he tells these learners an absolute falsehood in regard to the practice of the great masters, as their works will show. The artists of modern days, who, he says, know nothing of perspective, can speak for themselves. And, lastly, if Turner accepted the professorship of perspective in the Royal Academy, when ignorant of the subject, we can only say, that he had no more uprightness of mind than Mr. Ruskin, his great admirer and worthy trumpeter.

The book on all points, is equally true in theory, sound in reason, and definite in instruction,—yet the leading papers and periodicals vie with each other in praising the work, recommending it to the public, and the ancients who consulted their oracles, would as soon have thought of appealing from the decision given, as the admirers of Ruskin of appealing from his opinion. If one is bold enough to venture a doubt, the reply is, "Ruskin says so:" on every other subject, people use their own reason and common sense, and if teachers should adopt a book for another branch of study that was equally bad, these same editors would think them benighted, and lose no time in exposing its shallow fallacy. (If it were not for soiling your chaste pages with impertinent questions, we should like to ask them if they have ever made practical drawing a pursuit, or art a study?) If, at this enlightened day, the leaders of public opinion agree in endorsing so blind a guide in this department of instruction, it is surely time for educationists to arouse themselves and establish schools that shall be accessible to all classes of people, where they can receive thorough instruction in every department of art. Let it also include "A professor of *Æsthetics* or the History and Criticism of Art," who is competent to discuss the works of ancient artists, giving an opportunity to learn whether they too were versed in "those profound laws which make the foundation of modern science."

M. A. D.

MISS M. A. DWIGHT'S ART INSTITUTE,

HARTFORD, CONN.

MISS DWIGHT is now located in Hartford, Conn., as a teacher of drawing, where she is prepared to give instruction to those who may wish to learn the principles of art in connection with a course of practice that will secure skill of hand. Those who do not wish to give their time to drawing, can, by learning the theory and principles of art, become qualified to judge the merits of a picture. Instruction in this department is given in a course of familiar lectures, when the principles of composition are illustrated by engravings from the works of the old masters.

All well educated people, particularly those who have traveled abroad, can realize the importance of a more thorough system of instruction in art, than has hitherto been adopted, and if they would join in a united effort to accomplish this object, they would rank among the great benefactors of the age. Among the advantages gained by this knowledge of art is the power of appreciating and enjoying the works of the old masters that are so valued for their intrinsic merit, the beauties of which are lost to those who know nothing of the subject. Again, the beauties of nature, open and free to all, are more highly enjoyed when the laws by which they are produced are better understood, as they must be after studying the principles of art, of which they form the foundation.

Of the pecuniary advantages gained by a knowledge of art, it is useless to say much, so long as our people are content to depend on the skill of French designers instead of cultivating their own native ability. It is well known that the work of the French designers and artizans commands the market, and that this skill, founded on a thorough knowledge of the theory and practice of art, brings to their country an immense revenue, while our people, in their helpless ignorance, are cheated of heavy sums in exchange for worthless trash, duped with the fallacious idea of possessing "a genuine Raphael or Guido." We ask, why should not all acquire a knowledge of art that will save them the disgrace of gross imposition?

MISS M. A. DWIGHT will receive scholars at her house, *Hartford, Conn.*, for the purpose of giving them instruction in ART. Those who wish to become accomplished in artistic skill, and those who wish merely to study the subject previous to visiting Foreign Galleries, will, under her tuition, find the facilities required.

The instruction given in the arts of Drawing and Painting, is thorough and scientific.

The course of general instruction embraces the rules of Form, Light, and Shade, Color, Expression, and Composition, illustrated by Pictures, and by Prints, from the Antique and from the Old Masters. Also, Lessons in the History of Art from the earliest period to the present time, which will include some knowledge of Architecture and of Coins, Gems, and Engravings.

TERMS.—Price for Board and Tuition, \$120, for a term of Twelve Weeks, commencing May 1st, September 7th, and January 6th. PAYMENTS ADVANCED.

HARTFORD, CONN., 1858.

XVIII. OBITUARY.

MOSES BROWN IVES,* whose life presents a beautiful example of the true uses of wealth, education, and social influence, by one content to live as a public spirited citizen, an accomplished merchant and a Christian gentleman, was the eldest son of Thomas Poynton Ives and Hope Brown Ives.

Thomas P. Ives, who died in 1835, was endowed with a clear and discriminating mind; delicate taste; unerring sagacity; consummate knowledge of men; bland, but retiring manners; scrupulously methodical in the transaction of business; and of such truthful integrity, that an intimation of what he would do, was considered as good as his bond; it is not remarkable that, for the greater part of his life, he was the acknowledged head of the mercantile interest in Providence. To his example, that city owes more than it can well appreciate. If there attaches, both at home and abroad, a peculiar sacredness to the promise of a Providence merchant; if caution in decision, and energy in action have, in an unwonted degree, crowned our enterprises with success; if the financial prosperity of this city has been checked by but few, and these, unavoidable reverses; and if diligent attention to business has, in any manner, repressed the love of vulgar sensuality and the riot of luxurious extravagance; there is no man to whom we are so much indebted for all this, as the late Thomas Poynton Ives.

Hope Brown Ives was the sister of the late Nicholas Brown—a name intimately associated with almost every benevolent institution of which this city can boast. To the tenderest sympathy for every form of suffering, and a humility which none but those who knew her well would have conceived possible; she united that fearlessness of danger, which is hereditary in her family. During the long years of her widowhood, the labor of her life was beneficence. She seemed to place no other value on money than as it was the means of increasing the happiness of her friends, or of relieving the sorrows of the destitute. Venerated by the public, beloved by the good, and mourned by the widow and the orphan; at the age of eighty-two, on the 21st of August, 1855, an entrance was ministered to her into the everlasting kingdom of her Saviour and her God.

Moses B. Ives was born in Providence, on the 21st of July, 1794. He was early trained to liberal studies, and received an academical education at Brown University, where he graduated in 1812. Although early designated by his father to aid and succeed him in his own business, he wisely saw that no one can attain to eminence in this profession, without large knowledge and a thoroughly disciplined mind. He could perceive no reason why a merchant should not be as highly cultivated in his habits and tastes as any other man; while he believed that the range of information which his occupation demands, is almost unlimited. To understand accounts and to be familiar with all the forms of business, is the smallest part of his preparation. His office is, to understand and supply the physical wants of man; and, in the widest sense, to negotiate between the producer and consumer. Hence, he requires an intimate acquaintance with all the productions of the globe, both natural and artificial; the habits of nations which modify

* This memoir is only an abridgment of "*A Discourse in commemoration of the life and character of Moses Brown Ives, by Francis Wayland, D. D.*" Providence, 1857."

demand and supply ; the geography of the sea, so far as concerns navigation ; a thorough knowledge of political economy in all its branches,—especially of finance, or the laws which govern the circulating medium ; and last, but not least, a generous study of national and commercial law. To these may very properly be added a familiarity with modern languages, and with the history of civilized nations, especially since the era of the Reformation.

After completing his collegiate education, he entered the law school at Litchfield, Connecticut, then at the summit of its reputation. Having passed through the course of instruction pursued at this institution, he made the tour of Europe, and traveled extensively in our own country. While abroad, his object seems to have been, not so much to see sights, and walk through galleries, as to observe men, and acquaint himself with the habits and manners of merchants of distinction. I have heard him frequently refer to this period of his life, but I think never for any other purpose than to illustrate the modes of doing business in the several capitals which he had occasion to visit. Thus, from an extensive and minute observation, he formed his conception of the character of an accomplished merchant. This ideal, it was the effort of his life to realize in his own person. It was thus that he strengthened that confidence in general principles, on which wise forecast and steadiness of judgment essentially depend ; and cultivated that elevated sentiment of mercantile honor, for which he was ever preëminently distinguished.

Prepared, in this manner, for the career of life which he had chosen, he entered the counting-room and became familiar with the details of business, under the instruction of his father. In the year 1832, he became a junior member of the firm of Brown & Ives. On the death of his father, in 1835, the sphere of his duties became enlarged, and he was looked upon as the head of the house, and, by general consent, the leading merchant of Providence.

It would be interesting here, were it practicable, to unfold the maxims which he adopted in the transaction of business ; the investments which he chose, and those which he rejected, with the reasons of his preference, and the fulfillment or reversal of his predictions ; to mention the plans which he devised for the relief of his friends, in crises of financial embarrassment ; and the aid which he rendered in carrying these plans into execution. These, however, are subjects unsuited for a discourse like the present ; and, unfortunately, I am unable worthily to discuss them. I am, however, of the opinion, that he never became a party to any transaction which he had not maturely examined in all its bearings, and, for every contingency, of which he was not fully prepared. His judgments were formed, not on the expectation of extraordinary gains, but on a calm consideration of the history of the past. He turned instinctively, and from education, to the true rather than to the fanciful ; and never considered himself at liberty to use either his own property or that committed to his control, in such a manner that the safety of others, through any contingency which he could foresee, should be in any manner imperiled.

On all subjects related to his own profession, his knowledge was extensive and minute. With commerce and manufactures, in all their branches ; with the principles of finance ; with international and commercial law ; his acquaintance was familiar. That such knowledge, aided by large practical experience and guided by a singularly unbiassed judgment, should have made him a preponderating mercantile authority, wherever he was known, might easily be anticipated. Hence, when any new project was contemplated, or any important improvement

suggested, one of the first steps taken among us was, to secure his coöperation. The soundness of his opinions had been so well tested, that we almost considered his leadership a guaranty of success. I believe the result has proved, that the opinion which we formed of him was correct. The projects from which he stood aloof, have generally failed; while those in which he earnestly engaged, have as generally proved successful.

To conduct his business only in conformity with the received rules of trade, by no means realized his conception of personal honor. He had formed his own opinions of mercantile morality, and to these opinions he endeavored to conform his actions. The rules by which he was governed, were dictated to him, not from without, but from within. Hence, all his friends knew that whatever he had promised would be done, if to do it was within the limits of possibility. I believe that he would have sacrificed any amount of property,—nay, that he would have periled his life,—rather than violate the smallest financial engagement. He went further than this. He was careful to avoid any contingency which would have put it out of his power to do what he had promised. He adopted, in this respect, the rule of the late Dr. Bowditch—"to have the chapter of accidents always in his favor."

In the discharge of the duties of a citizen, he approached more nearly to a model, than any man with whom it has been my privilege to be acquainted. His view of this relation, and of the obligations which it imposes, was as distinct as it was unusual. He had formed a definite conception of the responsibility which rests upon every man, both as a member of society, and as the citizen of a particular community. Having formed this conception, he admitted, in its fullest extent, its application, not only to his property, but to his personal service. He believed, for instance, that every able-bodied citizen should bear his portion of the labor required to protect the city from the ravages of fire. He, therefore, entered his name, as a private member of one of our fire companies; and, for more than twenty years, discharged every duty of a fireman, with a promptitude, energy, and fearlessness, which could not be surpassed. When the peace of this State was in peril, in 1842, he thought the time had arrived, when liberty and law must look, for protection, to the right hand of every patriotic citizen. He never sought, nay, he would have scorned to accept a substitute. He, at once, entered the ranks as a private soldier; was foremost in every arduous and perilous service; and performed an amount of labor, during those days of sad agitation, of which hardly any other man among us was capable.

With such views of the duty of a citizen, it may well be believed that Mr. Ives took a deep interest in the cause of education, in all its departments. With every improvement in our common school system, his name is identified. From the date of the reform in our public school organization, until the failure of his health, he was a member of the school committee, and gave his time, without reserve, to the duties of this office. On no member of that committee, did a greater responsibility rest; and no one discharged that responsibility with a more single eye to the highest interests of the public. The principles by which he was governed, are aptly illustrated by the advice which he gave to the then, [N. Bishop, Esq.,] superintendent of the schools of the city. Meeting him, soon after his appointment, he said: "Never spend a dollar, unless it will advance the cause of education; and never withhold a dollar which will tend to this result. I do not care, in the least, how much I am taxed. The common schools of the city of Providence must prosper."

In Mr. Ives, the cause of liberal education found a faithful and unwearied supporter. In 1822, he was elected a member of the Board of Trustees, and in 1825, the Treasurer of Brown University. For thirty-two years, he discharged the onerous duties of this responsible office. During the twenty-nine years of my connection with the university, I do not remember an examination, at some of the exercises of which he was not present—unless detained by sickness—and in which he did not take a lively interest. As Treasurer of the university, he was brought more into intimate relations with the officers of instruction. No one of them will, I am sure, forget the fraternal care with which he watched over their interests. Was any of them sick,—he was the first person to visit him, with offers of assistance. Was any one borne down with labor, and in need of relaxation,—he was the first to suggest the remedy, and the most active in providing the means for its accomplishment. In all the efforts made, for the last thirty years, to increase the library, and improve the facilities for education, he ever bore a prominent part. His interest never flagged, when any thing could be suggested to improve the condition of the institution which he loved so well. If, in any respect, Brown University has gained in favor with the public; if it has taken a more honorable rank among the colleges of New England; if its means of education have been rendered, in any respect, ample, and its Board of Instruction such as would adorn any similar institution in our country; to no one are we more indebted for all this, than to the late Treasurer of the university.

In Sabbath Schools, Mr. Ives took a deep interest. He considered all our education worse than useless, unless it be thoroughly imbued with the element of Christianity. Hence, his contributions for this object, were always large. In the last year of his life, he learned that the facilities for Sabbath School instruction, in the congregation which he attended, would be greatly increased by some expensive improvements in their house of worship. No sooner had this come to his knowledge, than he entered into the project, with his accustomed energy; contributed largely of his means; aided it by his personal superintendence; and rejoiced greatly at its accomplishment. He frequently remarked, that in no manner could wealth be better appropriated, than in providing for the instruction of the young, in the principles of the gospel.

In the establishment of the Butler hospital for the insane, Mr. Ives took a prominent part. From the commencement of the institution, until his death, he was its Treasurer; and devoted no small portion of his time to the management of its concerns. From time to time, as he saw any opportunity for improving its condition, or alleviating the sorrows of its patients, his hand was ever open, and his devices ever liberal. Every woe that afflicted humanity, touched his sympathies; and he cheerfully proffered his wealth and his personal service, to lift off the load of sorrow that presses everywhere so heavily upon it.

In the discharge of the relative duties of life, there was much in the character of Mr. Ives, well worthy of imitation. Here I should do wrong, did I not, first of all, allude to his filial piety. The affection and reverence with which he was accustomed to speak of his parents, must have been frequently observed by his friends. Even to the close of his life, he seemed to take delight in carrying out, as far as he was able, the wishes of his father. He never alluded to him, or to his principles of action, without the profoundest respect and veneration.

Upon the death of his father, he assumed the principal care of his mother's establishment, and, with unceasing vigilance, watched over her comfort, with the

tenderest assiduity; anticipating every wish, and alleviating every sorrow. As her health declined, his attentions were redoubled. For some years before her death, her eyesight became impaired, until, at last, she was afflicted with total blindness. During this period, it was remarked that Mr. Ives attended public worship only on the morning of the Sabbath day. This deviation from his usual habit, occasioned some surprise; but the surprise changed to admiration, when it accidentally became known, that he spent the afternoon of every Lord's day in reading the Bible and other devotional books, with his aged and venerated mother. Such acts were, with him, matters of daily occurrence; but they were hidden from the public with the most scrupulous sensitiveness.

A touching incident, which occurred a few days before the death of Mrs. Ives, is too characteristic to be omitted. She had been couched for cataract, and, at the proper time, the bandages were, for a moment, removed, in order to discover the result of the operation. Her sight was restored. Her only exclamation was, "Let me see my son!" He stood before her, and, for the first time in several years, she looked upon his face. The bandages were instantly replaced. In a few days, paralysis ensued, and her eyes were closed forever.

[The following beautiful summary of the private character of Mr. Ives, is from the pen of Prof. Gammel, in the Providence Journal of August 12th, 1857.]

Such, is an imperfect outline of the manifold services which Mr. Ives has contributed to the highest and most important interests of this community. They were always performed, it should be added, with a modesty and disinterestedness which imparted to them a singular beauty and glory. He had no personal ends to accomplish, and, in every association with which he was connected, he preferred, if possible, to serve in the common ranks—without titled authority or official position. To him, the post of honor was always the private station; and we believe that he was never induced, though often solicited, to accept any office, whether political, social, or financial, merely of honor or emolument. He was always content faithfully to do the work, and was entirely willing that others should bear the honors, and receive the rewards.

In his personal character were blended, in singular harmony, rare and somewhat diverse moral qualities,—a heroic firmness of purpose, an unflinching courage, and an unswerving integrity, with a delicate respect for the feelings of others; a tender sympathy for every form of human suffering, and a lively interest in the good of all around him. While he will long be mourned by those who knew him, in the circles of society or the walks of business; his memory will, also, be gratefully cherished in many a home of poverty or misfortune, for deeds and words of kindness which the world knew not of.

It is in the retired sphere of private and domestic life, that the true man most reveals the lineaments of his moral being, and bears the choicest fruits of his endowments and his culture. Into that sphere of his best affections and his selectest joys, we presume not to follow him. All who ever met him there, will vividly recall the genial courtesy, the elegant hospitality, and the high bred, social spirit, which he delighted to spread over every scene.

Endowed by nature, with a constitution of unusual strength, and practiced in every manly exercise that could develop its powers, he had, until a comparatively recent period, scarcely known the experience of disease. In the month of May last, he was suddenly withdrawn from active pursuits, by the progress of the fatal malady which was already preying upon the organs of life. In his days of

health, however, he had not been neglectful of preparation for the inevitable hour; and, in the solitude of his own thoughtful mind, he had, for several years, cherished that Christian faith, which bore him, in calm submission to his Heavenly Father's will, to the gates of death. With every thing around him that earth can supply to make life attractive and desirable, with pious resignation, he cheerfully surrendered it all; and, in the serenity of a Christian hope and trust, he bowed to the appointment of Him who "doeth all things well."

RUSSELL HUBBARD, whose name deserves honorable mention in these pages, as a liberal benefactor of education, was born in Norwich, Connecticut, February 7th, 1785. On his mother's side he was descended from Elder Brewster, of the Plymouth colony. On his father's side his ancestry has been traced no further than to Daniel Hubbard, who was graduated at Yale College in 1727, and was a tutor in that institution for three years. Russell Hubbard, the son of Daniel Hubbard, and grandfather of the subject of this notice, was graduated at Yale in 1751, and died at Norwich, August 5th, 1785. Thomas Hubbard, the father of the subject of this notice, was the first publisher of the Norwich Courier. His son, Russell, on attaining his majority, became a partner with his father in the publication of the Courier, and in 1808, on the death of his father, became sole proprietor of the Courier, which he continued to publish until April, 1822. He also carried on a general business in bookselling and publishing, in connection with the publication of his paper; and, engaged, to a limited extent, in the manufacture of paper. In 1822 this last mentioned department of his business seemed to claim his exclusive attention, and he accordingly relinquished his interest in publishing and bookselling, and continued actively engaged in the manufacture of paper for fifteen years. In 1837, he listened to a proposition from his brother, Amos Hallam Hubbard, who was engaged in the same business, for the formation of a partnership, and thus originated the well known firm of R. & A. H. Hubbard, which continued, until it was terminated by the death of the senior partner, on the 7th of June, 1857.

In early life Mr. Hubbard's educational advantages were limited. His parents, who were driven from New London during the war of the Revolution, were able only to afford such opportunities of education to their children as came within the reach of the great majority of youth at that period. The dissolution of war gave little opportunity for the acquisition of any thing more than a strictly elementary and practical education. The means which were thus afforded him appear to have been most faithfully improved, and though he never laid any claim to a literary character, he was well informed, and, in the common branches, accurate far beyond the majority of business men. His early life was marked by industrious application to business, and the constant practice of those moral virtues which lie at the foundation of strong and virtuous character. He was, what is commonly termed, a self-made man. He was the architect both of his fortune and his character; and his fortune may be said to have been the result of his character. He adopted, from the outset, principles of the strictest integrity in the transaction of business, and profit was always held subservient to the maintenance of correct principles. This policy was not at once attended with what is commonly termed great success, though his course was always marked by thrift. Although he sustained losses, and, at one time, even severe losses, he never was obliged to avail himself of the provisions of a bankrupt law, or of any other accommodation with a creditor, than punctually and completely satisfying his claim.

The earlier portion of Mr. Hubbard's life, required the practice of economy, though it more assumed the character of parsimony. As the result of his industry and economy, the latter portion of his life was blessed with a rapid accumulation of property.

No sooner did he come into the possession of ample means, than he began to devise means of more extended usefulness. He was a liberal contributor to the various benevolent enterprises of the age; but, aside from these, cherished a desire to aid in the establishment, in his native city, of an institution of learning, which should afford to coming generations advantages superior to those which were engaged in his childhood. Prompted by this desire, he became an efficient counselor, and one of the most liberal contributors in the establishment of the Norwich Free Academy, a full account of which may be found in volume second of this Journal. After the completion of the first subscription of \$75,000, for the endowment of the Free Academy, at the organization of the Board of Trustees, he was chosen first president. He gave himself up to the duties of this office with a devotion worthy of the cause in which he was engaged. Under his administration one of the most spacious and elegant structures for educational purposes in the country was erected, and the permanent fund of \$50,000, for which provision is made in the charter, left without the incumbrance of any debt. The progress of the enterprise, however, enlarged the ideas of the friends of the institution. It was soon ascertained that the subscription must be increased by at least \$10,000. This sum was accordingly raised. On the completion of the edifice for the accommodation of the school, a still further subscription of \$5,000 was found necessary to preserve the integrity of the permanent fund of \$50,000, and relieve the institution from a small debt, which had been incurred in erecting and furnishing the building. This subscription Mr. Hubbard lived to see completed, and contributed himself to these subscriptions the sum of \$11,000. His liberality in giving was, however, no more honorable to him than the assiduity with which he labored to promote the interests of the Free Academy. His personal efforts, perhaps, were as valuable to the academy, as his pecuniary contributions. The completion of the building and the organization of the school, seemed to work the completion of the first period of the history of the academy. Mr. Hubbard and his coadjutors foresaw that the increase of the school would soon call for an increase in the permanent fund. He accordingly cherished the purpose of adding largely to his subscription, and of carrying the fund of the academy to the amount of \$75,000 or \$80,000. Mr. Hubbard did not live to participate in this work, to which he was looking forward with intense interest. His death was very sudden, as has already been stated, on the 7th of June, 1857. He was a man of remarkably pure life; of energetic and decided character. Few, very few men, in the evening of their days, have manifested so lively an interest in the welfare of the rising generation. He continued actively engaged in business until his death; not to increase his fortune, but to do good. The great question with him seemed constantly to be,—“How can I do the most good?”

His life was gentle; and the elements
So mixed in him, that nature might stand up
And say to all the world, “This was a man!”

XIX. NOTICES OF BOOKS.

1.—*Appleton's New American Cyclopaedia, Vol. II.* New York: D. Appleton & Co.

Prompt to their pledge, the publishers issued on the 15th of April, the second volume of this great national work. It contains some twenty-five pages more than the first, and, in the ability of its articles, the care and industry with which the latest facts have been gleaned, and the candor and impartiality everywhere manifested in the work, it more than makes good the promise of the first volume. We have had occasion to examine it very critically, and while there never will be a Cyclopaedia which has not some sins of omission to answer for, we must say that in this respect it is greatly more satisfactory than any work of the kind hitherto published. The editors, we know, take unwearied pains to avoid errors, and they have been remarkably successful thus far.

2.—*Cleveland's Compendium of English Literature.*

Cleveland's English Literature of the Nineteenth Century.

Cleveland's Compendium of American Literature.—Philadelphia: E. C. & J. Biddle.

The literary world owe a debt of gratitude to the enterprising publishers of the three works named above, and to the accomplished compiler, Prof. Cleveland, who has, in a form so neat and compact, brought together the choice contributions of the best authors of England and America in these volumes. The arrangement and biographical sketches are excellent, and the selection, brief as it necessarily is, exhibits in almost every instance the strong points of the author. The volumes even on English Literature, are greatly superior to Knight's *Halfhours*, with the best authors, and in their selection are preferable to the more extended work of Chambers. The *Compendium of American Literature*, though, of course, more brief than either Griswold's or Duyckinck's, has yet given a fair and just representation of our best writers.

3.—*Rome; its Churches, its Charities and its Schools.* By Rev. WM. H. NELEGAN, LL.D.; New York: E. Dunegan & Brother.

This is a valuable work for its full and minute account of the educational and charitable institutions of the "Eternal City." In Dr. Nelegan's eye, every thing appertaining to Rome appears *couleur du rose*, but we have no reason to believe that his notes on the topics to which we have referred, contain aught but the simple verity, and they exhibit a much more advanced condition of primary education than we are accustomed to credit to that city. His account of the reformatory connected with the Hospital of St. Michael founded by Cardinal Odiscalchi, and of the asylum of Tate Giovanni both of which have already been referred to in our pages, will be read with interest. We are gratified to see the number of such works as this multiplying; for every description of the schools and benevolent institutions of Europe, seems to stimulate the friends of education and humanity in our country to greater zeal and activity.

4.—*American Eloquence; a collection of the speeches and addresses of the most eloquent orators, forensic and parliamentary, of the United States.* By FRANK MOORE, 2 vols. 8vo. pp.; D. Appleton & Co.

This work which confines itself to the deceased orators of this country, is a fitting companion for the excellent compilation of Prof. Goodrich, entitled *British*

Eloquence. The speeches or addresses of each orator are prefaced by brief, but well written biographical sketches, and, in many instances, embellished by fine steel portraits. We have here the choicest samples of oratory from the great orators of the revolution, Otis, Fisher Ames, Samuel Adams, Patrick Henry, Warren, Edmund Randolph, Rutledge, and John Adams; the eloquent utterances of the early constitutional times, of Hamilton, Jay, Dickinson, Witherspoon, Quincy, Brackenridge, Pinckney, Morris, and H. G. Otis; the brilliant and caustic attacks and rejoinders of what has been appropriately termed the era of bad feeling, when William Pinkney, John Randolph, Giles, Rufus King, Edward Livingston, John Quincy Adams, and Tristan Burgess, met in the arena, and what, at first, seemed a sportive joust, oft changed into a deadly affray; and last of that period still nearer to our own times, when the silver tongued Clay moved all hearts by the persuasive powers of his oratory; when the stern Calhoun hurled the compacted masses of his iron logic with fearful effect against his former friends, now his bitter enemies; and when the master intellect of New England, alternately moved with his finished periods, and won by the vigor and force of his reasonings. Coupled with these intellectual giants, Mr. Moore has given us also specimens of the eloquence of others, who, though not the equals of the "first three," were yet mighty men in the senate and the forum, men who swayed audiences at will, and of whose burning eloquence there remains traditions which give us vivid ideas of its potency. Mr. Moore has performed the task of compilation with most excellent taste and judgment, and the work will be a valuable addition to the collections of speeches and debates already published.

5.—*How Plants Grow; Botany for Young People.* By ASA GRAY, M. D., New York: Ivison & Phinney; Small quarto, price 50 cents.

Lessons in Botany and Vegetable Physiology. Illustrated by 362 drawings from Nature; 8vo. 236 pp., price \$1.00; same author.

Manual of Botany; for Analysis and Classification; a Complete Flora of the Northern States, including Kentucky and Virginia. pp., 636, price \$1.50; same author.

The same work with the Mosses and Liverworts beautifully illustrated, and with descriptions; 767 pp., price \$2.50.

It is an excellent indication of educational progress, when the text-books in use in schools and academies, instead of being prepared as they generally are, at first by mere tyros in science, are the careful products of the most eminent minds in the respective sciences taught. We hail, therefore, with great pleasure the works of Prof. Gray, on the subject of Botany. No man in this country is his superior in his knowledge of Botanical Science, and his long career as a teacher of this and other departments of Natural History, and the extraordinary facilities he has enjoyed for investigating the Botany of the northern states, qualify him above any other man to prepare a catalogue of the known plants of those states. As a writer of text-books on this subject, his great merits are, clearness, and thoroughness. He seizes on the prominent generic and specific differences of plants, and describes them so accurately, and at the same time, with such brevity, that the mind of the student is not wearied in the effort to retain the distinctions. For a manual for the field, there is no work which can compare with it in these particulars. And these qualities make it as valuable in the recitation-room as in the field.

We must be permitted to express our gratification at the attractive manner in which both author and publishers have prepared the Primary Book, *How Plants Grow*. The science is, in itself, a pleasant one, but the simple and beautiful manner in which Prof. Gray introduces the young student to the plant, taking him

from its very cradle through all the vicissitudes of its life of change, making him observe how the minute germ peeps forth in search of nutriment, and expands upward and downward through the mysteries of the cell, the stalk, the leaf, the stem, exogenous or endogenous, till, in the fullness of time, it enters on its reproductive function, and, in its ripened fruit, perpetuates its species, and often also affords food to man and the animal creation, renders it a thousand fold more interesting than it would otherwise be.

6.—*A Dictionary of Medical Science.* By ROSLY DUNGLISON, M. D., LL.D. Fifteenth Edition Revised and greatly enlarged. pp. 992; Philadelphia: Blanchard & Lea.

To the members of the medical profession it would be a work of supererogation to commend this new edition of Dr. Dunglison's Medical Dictionary. They know him as a man of vast erudition, and of a mental constitution, so careful, accurate, and painstaking, that if this were the first, instead of the fifteenth edition, they would receive it unhesitatingly as the best work of the kind, because he had prepared it. But it is with the non-professional reader that we have to deal; and we can say to him with the utmost confidence that, wanting, as every man of general education does, a reference book which shall explain to him the medical terms, French or English, which he meets in his reading, he can not find one which will so fully supply his want as this dictionary. The labor on it has been immense. Here are sixty thousand titles, including the French medical synonyms, which are met with in general reading nearly as often as the English; and on every topic of importance there is a brief, comprehensive, and well considered essay. It is a work essential to the completeness of a gentleman's library, and its sale of fifteen thousand copies in this country, and as many more in England, where it has no rival, shows conclusively the public appreciation of it. The present edition has about six thousand new titles, and the previous topics carefully corrected.

7.—*University of Mississippi—Origin and Endowment—Regulations and Plan of Operations.* Catalogue for 1857-58. 64 pages.

Letter to the Honorable, the Board of Trustees of the University of Mississippi. By FREDERICK A. P. BARNARD, LL.D., President of the University; Oxford, Miss.: 1858. 112 pages.

The Letter of President Barnard is an eloquent appeal to the Trustees of the University of Mississippi, and through them to the people of that state, in behalf of a system of education and instruction, which shall be worthy of a first class University, toward the expense of which, the Legislature now appropriates annually, the sum of \$20,000. While the old American collegiate feature is recognized, and in reality strengthened, the studies which make the university complete in all the many aspects of a repository of universal truth, and a dispenser of universal knowledge, are properly provided for.

NOTICES

The *Twenty-eighth Annual Meeting of the American Institute of Instruction*, will be held at Norwich, Conn., on the 17th, 18th, 19th, and 20th of August, 1858.

The *National Teachers' Association*, will hold its Second Annual Meeting at Cincinnati, on the 11th, 12th, and 13th of August, 1858.

The *American Association for the Advancement of Education*, will hold its Eighth Annual Meeting in November, 1858, at Albany, N. Y.

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I. MEMOIR OF CALEB BINGHAM.

WITH NOTICES OF THE PUBLIC SCHOOLS OF BOSTON, PRIOR TO 1800.

BY WILLIAM B. FOWLE.

CALEB BINGHAM, who enjoyed an enviable reputation as a private and public teacher in Boston, Mass., toward the close of the last century, and, who, through his school books, was, perhaps, more extensively known than any contemporary teacher in the United States, was born at Salisbury, in the north-western corner of Connecticut, April 15th, 1757. His father* was a very respectable farmer, and his mother a descendant of Roger Conant,† first among the worthies that settled at Salem, before Boston was founded by Governor Winthrop.

Little is known of the youth of Caleb. Salisbury was a new town, containing many Indians of such doubtful character, that the worshippers on Sunday, went to church armed; and the log house used for a church had portholes like the forts of older New England towns, and a guard was stationed at the door. Such a state of society would afford but little chance for a regular education, and the tradition is, that Caleb was prepared for college by the Rev. Dr. Salter. The sisters remembered that Caleb was a slender boy, while his brother Daniel was unusually robust, and there can be no doubt that the same mistake was made, in this case, that is every day made in our agricultural districts; the boy who needed air and exercise was con-

* There may be no difficulty in tracing his paternal ancestors. The tradition is that Jabes, the grandfather of Caleb, presented his son Daniel, with a hundred acres of land in Salisbury, near the mountain, and he, after the birth of Caleb, purchased the beautiful farm between the Lakes Washinee and Washining, and lived there till his decease, February 1, 1806. His wife had died just a year before him, and the homestead came into the possession of Caleb, whose local attachment induced him much against his interest and the advice of his family, to bury out the other heirs, and erect a somewhat expensive house adjoining the old mansion in which he had spent his youth.

† Cotton Mather informs us that, about the year 1624, a worthy gentleman, Mr. Roger Conant, was sent over from England to Salem, for the purpose of encouraging, strengthening, and promoting the settlement of the new country. Soon after his arrival, which was with a company of whom he was chief, his son Exercise was born. How many other sons he had we are not told, but this Exercise had Josiah and Caleb, and removed into Connecticut, where he died. His remains were deposited in the burial ground of the First Society in Mansfield, where his tomb stone is still to be seen. Josiah had but one child, Shubael, who was a counsellor for the state, colonel of the regiment, judge of the county court and of probate, and deacon of the church in Mansfield. Caleb had seven children, of whom Hannah, the youngest, married Daniel Bingham, and removed to Salisbury, in Connecticut, where Caleb, their second son, the subject of this memoir, was born.

finer to, what is more fatal than hard labor in a penitentiary, the narrow walls of a school-room or college, and the hearty boy, who was able to endure such inactivity, was sent into the field. Whether Caleb had shown any unusual love for study is not known, but if he was feeble, as seems to be the fact, he was probably indulged, and allowed to read while his brother was at work.

The family of Dr. Wheelock, the founder of Moor's school and Dartmouth college, and that of Mr. Kirkland, the distinguished missionary to the Indians, were related to the Bingham, and this probably led Caleb to Dartmouth rather than to New Haven. Moor's Indian school had been removed to the wilderness a few years before, and the high character of the elder Wheelock, had even obtained aid from England to found a college, where the scattered condition of the inhabitants made even common schools a rarity. Mr. Bingham entered college in 1779, a bustling period on the frontiers, and he graduated in 1782. Immediately after he graduated, he was appointed master of Moor's charity school, which was an appendage to the college, and under the direction of the same persons who managed the affairs of the higher institution. The respectful intercourse that always existed between Mr. Bingham, the Wheelocks, father and son, the professors of the college, and the venerable Eden Burroughs, clergyman of the town, to much of which the writer was a witness, abundantly proves the high estimation in which Mr. Bingham was held as a scholar and a man. While an under-graduate, Mr. Bingham united himself with the church under the care of Mr. Burroughs, and his affection for this excellent man no doubt led him to take the interest he did in endeavoring to check the wayward career of his son, the somewhat notorious Stephen Burroughs.

Mr. Bingham removed to Boston, about the year 1784.* He had

* It is suspected that, on the way to Boston, he stopped at Andover, and had the care of Phillips Academy, a few months, after Dr. Pearson left it to assume the professorship of Hebrew at Harvard college; for the venerable Josiah Quincy thinks he was for several months a pupil of Mr. Bingham at Andover, where an unsuccessful attempt was made to induce him to become the permanent Principal. There is much truth and feeling in the following extract from a letter of this distinguished man, and to fully appreciate the tribute, it should be known that the parties were at the opposite extremes in politics, when such a position generally embittered all the intercourse of life. "As the subject lies in my mind," says Mr. Quincy, "in the autumn of 1786, Mr. Bingham succeeded Dr. Pearson, in the care of the Academy, but did not remain longer than the April of 1786. While there, I was his pupil, and recollect well that his kind and affectionate manner of treating the scholars gained their attachment, so that his determination not to become a candidate for the permanent instructorship was a subject of great disappointment to the boys. All my impressions concerning him are of the most favorable kind. He was a man of heart; and his feelings led him to take great interest in the character and success of his pupils, and, as is usual with such men, his kind affections were reciprocated by those who enjoyed his instruction."

This reminiscence, which is entitled to great weight, places Mr. B.'s advent in Boston, much later than the time named by his family, and as he married in 1786, it hardly allows a reasonable time for forming an acquaintance, which must have commenced after his arrival.

learned that there was an opening for an enterprising teacher in Boston, and he came with the strongest recommendations from the government of the college.

The main object of Mr. Bingham in coming to Boston was to establish a school for girls; and the project was of the most promising description, for the town of Boston had even then become eminent for its wealth and intelligence, and, strange to say, was deficient in public and private schools for females. It certainly is a remarkable fact, that, while the girls of every town in the state were allowed and expected to attend the village schools, no public provision seems to have been made for their instruction in the metropolis, and men of talents do not seem to have met with any encouragement to open private schools for this all important class of children. The only schools in the city to which girls were admitted, were kept by the teachers of public schools, between the forenoon and afternoon sessions, and how insufficient this chance for an education was, may be gathered from the fact, that all the public teachers who opened private schools, were uneducated men, selected for their skill in penmanship and the elements of arithmetic. The schools were called writing schools; and, although reading and spelling were also taught in them, this instruction was only incidental, being carried on, we can not say "attended to," while the teachers were making or mending pens, preparatory to the regular writing lesson.

This had probably been the state of things for more than a century, and at the advent of Mr. Bingham, there were only two such schools, while there were two others devoted exclusively to the study of Latin and Greek, although the pupils of these latter schools hardly numbered one tenth of the others. Of course, the proposal of Mr. Bingham to open a school, in which girls should be taught, not only writing and arithmetic, but, reading, spelling and English grammar, met with a hearty reception, and his room, which was in State street, from which schools and dwelling houses have been banished nearly half a century,* was soon filled with children of the most respectable families. There does not seem to have been any competition, and Mr. Bingham had the field to himself for at least four years before any movement was made to improve the old public system, or to extend the means of private instruction.

At that time, and for more than a century and a half, the public schools of Boston, and indeed, those of the state had been under the control and supervision of the selectmen, three to nine citizens, elect-

* Probably in the building on the lower corner of Devonshire and State streets, afterwards the Post Office.

ed annually to manage the financial and other concerns of the several towns, without much, if any, regard to their literary qualifications. The selectmen of Boston were generally merchants, several of whom, at the time under consideration, had daughters or relatives in the school of Mr. Bingham. It was natural that the additional expenses thus incurred, for they were taxed to support the public schools, from which their daughters were excluded, should lead them to inquire why such a preference was given to parents with boys; and the idea seemed, for the first time, to be started, that the prevailing system was not only imperfect, but evidently unfair. The simplest and most natural process would have been to open the schools to both sexes, as the spirit of the laws required, but this would have left the instruction in the hand of the incompetent writing masters, when a higher order of teachers was required; or it would have involved the dismissal of all the writing masters, a bold step, which the committee dared not to hazard, because many citizens were opposed to any innovation, and the friends of the masters were so influential, that no change was practicable, which did not provide for their support. After much consultation, therefore, there being some complaint of the insufficient number of the schools, the school committee proposed the only plan which seemed to secure the triple object,—room for the girls, employment for the old masters, and the introduction of others better qualified.

The new plan was to institute three new schools, to be called **READING SCHOOLS**, in which reading, spelling, grammar and perhaps geography, should be taught by masters to be appointed; the two old writing schools to be continued, a new one established; and one of the Latin schools to be abolished. As no rooms were prepared, temporary ones were hired, so that the same pupils attended a writing school in one building half the day, and a reading school in a different building, at a considerable distance, and under a different and independent teacher, the other half. Each reading school had its corresponding writing school, and while the boys were in one school, the girls were in the other, alternating forenoon and afternoon, and changing the half day once a month, because, Thursday and Saturday afternoons being vacation, this arrangement was necessary to equalize the lessons taught in the separate schools. This system afterwards acquired the name of the double-headed system, and it was continued, essentially, for more than half a century, in spite of all the defects and abuses to which it was exposed. Even when the town built new school houses, the upper room was devoted to the reading school, and the lower to the writing, the masters never changing rooms, and the

boys and girls alternating as before. The points gained, however, were very important, the girls were provided for, better teachers were appointed, and the sexes were separated into different rooms. This latter provision, which we consider inestimable, and the great distinction of the Boston schools, seems to have been the result of accident or necessity, but the deepest insight into human nature, the profoundest sagacity, the highest wisdom, could not have invented a more effectual barrier against vice and depravity. Sentimentalists sometimes tell us of the beneficial influence of the gentler upon the ruder sex in mixed schools, but a long and wide experience has satisfied the writer that the evil influences arising from mixed schools, whether primary, high, or normal, are incalculable. Mr. Bingham would never have taught a mixed school, and he foresaw that even the primary schools of Boston, would be nurseries of vice, if, as was proposed, the separation, which existed in the upper schools, was not extended to them.

As no provision was made in the reading schools for any exercise in writing, no such exercise was required there; and the immense advantage arising from having the teacher able to give instruction in penmanship, as well as in orthography, and composition, was wholly lost. The writer passed through an entire course in the Boston schools, and was never required to write a sentence or a word of English. The first three reading masters were good penmen, and Mr. Bingham was distinguished for his skill, but this was not afterward considered an essential qualification of the reading master; and when, forty years afterward, a change was proposed in the schools, by which the "double-headed system" was to be reduced to a single head, the reading masters were found as incompetent to teach penmanship as the writing masters had always been to teach any thing else. Another amusing error prevailed in the schools for more than a quarter of a century. The committee adopted the notion that girls could not attend school in Boston, where there were sidewalks, although they did in the country where there were none; and so the girls were only allowed to attend the schools six months, from April to October, and, during the winter months, half the boys attended the reading schools, while the other half attended the writing, alternating as the boys and girls did in summer.

Before the new system went into operation, the great object was, to secure the services of Mr. Bingham, and he was accordingly appointed with a salary of two hundred pounds. His letter accepting the appointment, is dated Dec. 12, 1789, and is characteristically modest:—"He is not sure that he shall fulfill their expectations, and hopes the pecuniary sacrifice he makes by relinquishing his private school will be a

public gain." The same room he had before occupied, was hired by the town, and Jan. 4, 1790, the new system went into operation. Previous to this reform, the writing masters had been allowed to teach private schools, but this was soon strictly forbidden, and a general remonstrance signed by all the reading and writing masters, did not move the committee to rescind the regulation. Much dissatisfaction prevailed, but Mr. Bingham, not having opened a private school, did not enter into the controversy so zealously as Master Carter and some others. The small compensation of the teachers, and the want of schools for girls, under the old plan, had led to this abuse, but, while we praise the committee for their discernment in abolishing the privilege, we can not praise their liberality in refusing to raise the salaries according to the loss evidently incurred.

Another evil in the new system also held its ground for many years. Boys had been admitted into the Latin school at the early age of seven years, on the mistaken idea, that the very young are best qualified to learn a dead language, as they undoubtedly are to learn a spoken one. The age was increased to ten years by the new system, but, as before, no provision was made in the Latin school for their instruction in English, in penmanship, or in any of the common branches. To remedy this serious defect, the Latin scholars were *allowed* to attend the writing schools two hours, forenoon or afternoon, and about thirty availed themselves of the privilege, although they were obliged to neglect one school to attend the other, and unpunctuality and disorder, in all the schools, were the natural consequence.

The prohibition, to teach private schools, does not appear to have been of long continuance; for, although the records do not show that the order was repealed, these intermediate private schools were common early in the present century, and permission to the Latin scholars to attend the writing schools was withdrawn. The teacher of the Latin school in connection with a writing master, kept a private English school in the Latin school-room, while the writer, was a pupil there, in 1808, and the writer himself attended a private school kept by a reading master in another part of the town. Of course, it was a passport to favor in every public school, to attend the master's private school also, and those who only went to the public school, were considered a somewhat inferior caste. Sometimes the ushers opened private schools in the evening, but these were chiefly attended by apprentices, and boys who attended no other school.

Every master was allowed one assistant called an *usher*, and several of those first employed, were afterwards advanced to the mastership, but this was always treated as a very subordinate situation; for

the salary could not tempt a man of any talent, and the committee soon let it be seen that ushers were not candidates for promotion.

Complaints of insufficient pay, were constantly made in the shape of petitions from both masters and ushers, but no change was made during the official career of Mr. Bingham. Mr. B., was a modest and sometimes even timid man, but there were at least, two occasions on which he showed that there was no lack of moral courage, when his course was clearly indicated by duty. He had not long been in office, before he, and all the other teachers, had reason to complain of the unpunctuality of the town in paying their salaries. The treasurer was accustomed, either for the want of funds, or for the sake of speculation in the stock he created, to give a paper to the teachers, certifying that the town owed them a certain sum, and this certificate, which was called a "town order," the needy masters were obliged to sell at a considerable discount. As remonstrance might be followed by dismission, the teachers bore the imposition a long time; but, at last, Mr. Bingham, smarting under the repeated losses that he had suffered, and not readily finding a purchaser, advertised a "a town order for sale at a liberal discount." At a town meeting that occurred soon after, the insult, thus publicly offered to the town, was the subject of severe remark, and the meeting, highly indignant, despatched an officer to command Master Bingham instantly, to appear and apologize for the offence. He promptly accompanied the officer to Faneuil Hall, and after the offence was formally stated to him by the chairman of the selectmen, he was called upon for his apology. Mr. B., nothing daunted, stretched himself to his full height, and, in a voice that no one failed to hear, gave a brief history of his experience, with which the citizens were, probably, unacquainted, and then concluded with these words: "I have a family and need the money. I have done my part of the engagement faithfully, and have no apology to make to those who have failed to do theirs. All I can do is to promise, that, if the town will punctually pay my salary in future, I will never advertise their orders for sale again." The treasurer immediately slapped him on the shoulder and said, Bingham, you are a good fellow; call at my office after the meeting and I will give you the cash. Mr. B., had little trouble after that in collecting what was due him for his services.*

Among the beneficial changes of the new system, was the addition of twelve citizens to the board of selectmen, for the sole purpose of

* To the other instance of personal courage, which happened twenty years or more afterward, the writer was a witness. The government of the town had determined to break up a large settlement of houses of ill-fame, and the accompanying haunts of vice, that had long been a disgrace to the town, and an annoyance to all peaceable citizens in the neighborhood. An active police officer, named Reed, had made several arrests, and was singled out by a desperate mob as the victim of their vengeance. This mob, armed with clubs and missiles of

superintending the schools. A law authorizing this change had been enacted by the legislature, mainly at the request of the metropolis; but the advantage expected from it was almost neutralized in Boston, by the retention of the selectmen as *ex-officio* members of the school committee; the chairman of the former always presiding at the meetings. Those acquainted with the history of Boston will recognize, in the following list of the first school committee proper, an amount of intellect and character rarely seen in such a body.

John Lathrop, D. D., of the North Church.

Samuel West, D. D., of the West Church.

James Freeman, D. D., of the Stone Chapel.

N. Appleton, M. D.,

Thomas Welch, M. D., } all distinguished physicians.

Aaron Dexter, M. D., }

George Richards Minot, Judge and Historian of Massachusetts, after-
Christopher Gore, LL.D. [ward Governor.

Hon. Jonathan Mason, Jr., Senator.

Hon. William Tudor, Judge.

Hon. Thomas Dawes, Judge.

Hon. John Coffin Jones, Merchant and Senator.

Not one of this first committee was a common man, but no one is now living to witness the result of his labors. Their unanimity in adopting the reform, and selecting Mr. Bingham to lead in the improvement, is no faint compliment to the rank and ability of their teacher.

Allusion has been made to some of the alterations introduced by the new system, but, perhaps, the state of education may be better illustrated by an extract or two from the records. One regulation

every description, pursued Reed, who, running for his life, dashed into Mr. B's yard for shelter. Mr. B., opened the door to him, told him how to pass through the house and escape; and then went out to face the mob. He had no hat on, and his white hair and dignified personal appearance, for a moment quieted the rioters. He seized the happy moment, and, standing on an elevation where he was seen by the crowd that beset the house, he said in the powerful voice, that he is said to have inherited from his father, "Fellow citizens, you are breaking the laws, and I command you in the name of the Commonwealth of Massachusetts to disperse. I am a magistrate." His family urged him not to venture out, for it would cost him his life; but he saved the officer, and dispersed the mob, in less time than it has required to record the anecdote.

The personal appearance of Mr. Bingham, was favorable to such a demonstration. His height was about six feet, and his frame well proportioned and well developed. His face was pleasant, but rather short. His eyes were light blue, his nose short and rather sharp, his hair was dressed with earlocks, powdered, and braided behind, exactly in the style of Washington's. He wore almost to the last, a cocked hat, black coat and small clothes, with a white vest and stock, and black silk hose. In winter, he wore white topped boots, and in summer, shoes with silver buckles. His appearance and manners were those of a gentleman; he was respectful to all; affable, gentle, and free from any of the traits which are apt to cling to the successful pedagogue. At the age of sixty, he began to stoop a little in consequence of disease that principally affected his head, and his nerves began to shake; but though represented to be feeble in his youth, there was no appearance of debility in manhood. He could dress himself and walk the room twenty-four hours before he died.

requires the writing masters to teach "writing, arithmetic, and the branches *usually taught in town schools*, including vulgar and decimal fractions." Another regulation required the reading masters to teach "spelling, accent, and the reading of prose and verse, and to instruct the children in English grammar, epistolary writing and composition." "Boys and girls were to be admitted at seven years of age, if previously instructed in the woman schools," which, it will be recollected, were all private schools, over which the committee had no control, and to which those only who could pay were admitted.

The Latin school under Master William Hunt, was kept in a small, square, brick building, which stood on a lot opposite the present City Hall, in School street. The north reading school, was in Middle street, and the north writing, in North Bennett street. The central reading was in State street, and the south writing, was at the corner of West and Tremont street, the south reading, being in Pleasant street. The central writing, under Carter, is said, in the record, to be in Tremont street. The north Latin school, that was discontinued, stood on a lot by the side of the north writing school.

The books used in the reading schools were, the Holy Bible, Webster's Spelling Book, Webster's Third Part, and the Young Lady's Accidence. The Children's Friend and Morse's Geography were allowed, not required; and "Newspapers were to be introduced, occasionally, at the discretion of the masters." This is the first time* that the writer ever saw newspapers required by a school committee, but there can be no doubt that the regulation was the result of true wisdom. The misfortune was, that the rule was entirely neglected, as was that requiring composition to be taught in connection with English grammar. The probability is that, for twenty years, not a newspaper was read in any school, nor a word written. The Latin school was divided into four classes, and the books used were,

FIRST CLASS.	SECOND CLASS.	THIRD CLASS.	FOURTH CLASS.
Cheever's Accidence.	Clarke's Introduction.	Cæsar.	Virgil.
Cordery.	Ward's Latin Gram.	Tully's Epist. or Offic's.	Cicero's Orations.
Nomenclator.	Eutropius.	Ovid Metamor.	Greek Testament.
Æsop, Latin and Eng.	Selectæ e Vet. Test.	Virgil.	Horace.
Ward's Latin Gram.	Castillo's Dialogues.	Greek Grammar.	Homæ.
or Eutropius.	Garretson's Exercises.	Making Latin from	Gradus ad Parnassum.
		King's Heathen Gods.	Making Latin contin'd.

The writer remembers Master Hunt, as a frequent visitor at Mr. Bingham's bookstore. The committee removed him after several years' service under the new system, and the injustice of the removal was the burden of his conversation. He taught private pupils several years after he left the public service, was a venerable looking man,

* Comenius did this two hundred years before. En.

and is well represented by his grand children, one of whom has been distinguished as a teacher of the same school.

Furthermore, it was ordered that, in the writing schools, the children "should begin to learn arithmetic at eleven years of age; that, at twelve, they should be taught to make pens." Until eleven years old, all the pupils did, in a whole forenoon or afternoon, was to write one page of a copy book, not exceeding ten lines. When they began to cipher, it rarely happened that they performed more than two sums in the simplest rules. These were set in the pupil's manuscript, and the operation was there recorded by him. No printed book was used. Such writing and ciphering, however, were too much for one day, and boys who ciphered, only did so every other day. If it be asked, how were the three hours of school time occupied? The answer is, in one of three ways,—in mischief; in play; or in idleness. The pupils were never taught to make their own pens, and it occupied the master and usher two hours of every session to prepare them. The books were generally prepared by them out of school hours. The introduction of metallic pens, relieved the teachers from their worst drudgery, and left them free to inspect the writing of their pupils, which was impossible before.

In the reading schools, the course was for every child to read one verse of the Bible, or a short paragraph of the Third Part. The master heard the first and second, that is, the two highest classes, and the usher heard the two lowest. While one class was reading, the other studied the spelling lesson. The lesson was spelled by the scholars in turn, so that the classes being large, each boy seldom spelled more than one or two words. In grammar, the custom was to recite six or more lines once a fortnight, and to go through the book three times before any application of it was made to what was called parsing. No geography was prepared for the schools until Mr. Bingham left them. Morse's abridgment began to be a reading book about the year 1800, and soon after, Mr. Bingham prepared his little Catechism, which was probably based upon it. When Mr. B's American Preceptor was published, it displaced Webster's Third Part. His Child's Companion superseded Webster's Spelling Book in the lower classes, and the Columbian Orator, was the reading book of the upper class, to the displacement of the Bible, which, instead of being read by the children, was read by the reading masters as a religious exercise, at the opening of school in the morning, and at its close in the afternoon. The writing masters were not required to read or pray for fifteen or twenty years after the great reform.*

* The above, the writer believes is a fair account of the system, which has given Boston an

The Franklin Medals were introduced during the public service of Mr. Bingham, but he never heartily approved of the influence thus exerted; for it was evident, he said, that only a very small portion of the pupils had any hope of acquiring a medal, or made any effort to do so, while the disappointment of many who did endeavor, caused him no little pain. It is to be hoped that the school committee will continue to strip this well meant bequest of the great Bostonian of its unequal and often injurious influence.

There were three reading masters; Mr. Bingham was undoubtedly the first, and the second in rank was Elisha Ticknor. This gentleman was also from Connecticut, and a graduate of Dartmouth, and is supposed to have been invited to Boston, to assist Mr. Bingham in his private school. The writer well remembers him as a tall, thin, erect and grave man, a deacon of the old South Church, and more stiff and ceremonious than his remote relative, Mr. Bingham. He married a widow lady of some property, soon after he took the South Reading School, and, becoming dissatisfied with the slender income of a public teacher, he resigned his office at the end of five years, turned grocer, and by frugality and strict attention to business acquired a handsome property before his decease, which took place in 1827.

The third reading master was Samuel Cheney, who was teaching in Tyngsborough, Mass., when he was appointed to the north school in Boston. He had graduated at some college, but his letter of application, now on the files of the school committee, indicates a very low state of English scholarship. He did not give satisfaction, and was dismissed in 1793, although many parents of his pupils, and several influential citizens, strove hard to induce the committee to retain him.

The chief writing master was John Tileston. He had long been in the public service, and by faithful attention to his narrow round of duties, was retained, although destitute of energy and invention. He was born at Braintree, near Boston, about 1738, and, when a boy, was taken by Master Proctor, (deacon of the First Baptist Church in Bos-

enviable reputation throughout the world. It is evident that it must not be measured by what education ought to be, but by what it had been. It is by no means certain that the schools of Boston were any better than those of the country before 1790; for, although the Boston schools were open the year round, while the country schools did not average six months, it is claimed that as much was learned in the six months as in the twelve, and while the school age was restricted to fourteen years in Boston, it was unlimited in the country, and girls as well as boys were taught in less crowded schools. If it be said that Boston has maintained a high rank in literature and mercantile enterprise, it may be also said, with truth, that the greater number of her literary men, and most enterprising merchants, were not born or educated in Boston. Of all the first set of teachers under the new system, not one was of Boston, and of the many hundreds that have succeeded them, the writer can not call to mind a half dozen Bostonians.

ton,) to be his apprentice. Before the Revolution, he became an usher, and, at the death of Deacon Proctor, was appointed master. In this office he continued till 1823, when, at the age of eighty-five, or thereabout, he was allowed a pension of six hundred dollars a year, and the rank of master, without any school. This was the first case of a pension on the records of the town, and but one other case has since occurred. How forcibly does this neglect of useful citizens contrast with the practice that prevails in every *civilized* country, of pensioning soldiers, often the most worthless members of the community, whose life, at best, is one continued warfare upon the true interests of society, and at variance with the leading principles of the Gospel of the Prince of Peace. Master Tileston was a very short and thick man, of a fair and ruddy complexion, and always wore the horsehair wig, bushy, but not curled, that was worn by the clergy of Boston, until near the end of the last century. When young, some accident by fire had crippled his right hand, and yet his penmanship was elegant for the times. He loved routine; and probably, if he had taught a school a century, he would never have improved any arrangement of it. Printed arithmetics were not used in the Boston schools till after the writer left them, and the custom was for the master to write a problem or two in the manuscript of the pupil every other day. No boy was allowed to cipher till he was eleven years old, and writing and ciphering were never performed on the same day. Master Tileston had thus been taught by Master Proctor, and all the sums he set for his pupils were copied exactly from his old manuscript. Any boy could copy the work from the manuscript of any other further advanced than himself, and the writer never heard of any explanation of any principle of arithmetic while he was at school. Indeed, the pupils believed that the master could not do the sums he set for them, and a story is told of the good old gentleman, which may not be true, but which is so characteristic as to afford a very just idea of the course of instruction, as well as of the simplicity of the superannuated pedagogue. It is said that a boy, who had done the sum set for him by Master Tileston, carried it up, as usual, for examination. The old gentleman, as usual, took out his manuscript, compared the slate with it, and pronounced it wrong. The boy went to his seat and reviewed his work, but finding no error in it, returned to the desk, and asked Mr. Tileston, to be good enough to examine the work, for he could find no error in it. This was too much to require of him. He growled, as his habit was when displeased, but he compared the sums again, and at last, with a triumphant smile, exclaimed, "see here, you *nurly* (gnarly) wretch, you have got it, 'lf four tons of hay cost

so much, what will seven tons cost?" When it should be, "If four tons of *English* hay cost so and so. Now go and do it all over again." Whether this be true or not, there is no doubt of the truth of the two following anecdotes, which are told more to show the state of instruction in the schools, than to expose the incompetency of the teacher, who was evidently retained from pity or affectionate regard, long after his usefulness was at an end. Once, after the writer had done the two sums in subtraction, which had been set in his manuscript, being tired of idleness, and seeing the master at leisure, he ventured to go up to the desk and ask the master to set him another sum. This was a bold innovation, and the old gentleman considered it nothing less, but, as the pupil was somewhat of a favorite, he only growled as he took the manuscript, and said, "Uh, you nurlly wretch, you are never satisfied." Again, after the writer was apprenticed to Caleb Bingham, Master Tileston called at the bookstore, and, out of respect for the venerable man, the pupil wiped his pen on a rag that hung by the desk for that purpose, and suspended his work. The old gentleman approached the desk, and carefully raising the rag with his thumb and forefinger, said, "What is this for?" "To wipe the pen on, sir, when we stop writing," said the respectful pupil. "Uh! it may be well enough," said he, "but Master Proctor had no such thing." Master Tileston, always wiped out his pens with his little finger, and then cleaned his finger on the white hairs just under his wig. His model, Master Proctor, had been dead half a century, perhaps, but he still lived in the routine that he had established. When will school committees discover that it is incalculably cheaper to pension one such deserving and faithful servant, than intellectually to starve a whole generation of children.

James Carter, the master of the centre writing school, that was connected with Mr. Bingham's reading school, was a different man. He also had been a public teacher many years before the great change, and was renowned for his elegant penmanship. Imperious in school, he lived freely, and at least to the full extent of his means. Accustomed to what was called good society, he had the free and easy manners of his associates, and was not particularly fitted to mould the manners of the young. He appears to have ruled the schools and the committee until the change of systems, and he did not yield with a good grace to that order of things which brought with it some restraint and more labor, while it made his office subordinate, in fact, to the head of the reading school. He died, however, in the harness, for he could not afford to resign the salary allowed him although inadequate to his support.

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The third writing master was John Vinall, who was born in Boston, and had been a teacher in Newburyport, seventeen years before he obtained the south writing school in his native city. He was a very unpopular man, and complaints, especially of coarseness of speech, were made to the committee; and, though he indignantly denied their truth, the opposition continued until he resigned, March 28th, 1795. He was tall, thin, always meanly dressed, when the writer became acquainted with him, and his features pock-marked were very ugly, but a long and familiar acquaintance with him leads the writer to say that, though miserly in his habits, and having a doubtful reputation as a justice of the peace, there was nothing in his language, or manners, to indicate that there was any truth in the charges brought against him as a teacher. He early purchased an estate on Beacon street, that afterwards became very valuable; and he was said to be useful as a political agent to his neighbor, Governor Hancock. It may have been so, but this would rather account for the prejudices against him, than prove him an unprincipled man. In politics he was a Jeffersonian republican, and this was enough, in those days, to ruin the prospects of any man who sought distinction in Boston. Mr. Vinall was the only teacher besides Mr. Bingham, that ventured to publish a book, and he composed an arithmetic, which never sold, and which, though recommended to others by the school committee, seems never to have been adopted for use in the Boston schools. He died in Boston about the time that Mr. Bingham did, leaving a son and two very worthy unmarried daughters.

While a private teacher in Boston, Mr. Bingham had published a small English grammar, which, being intended for his female pupils, he called "*The Young Lady's Accidence, or a short and easy Introduction to English Grammar; designed principally for the use of Young Learners, more especially those of the Fair Sex, though proper for either.*" When the author entered the public service, his book followed him. It was the first English grammar ever used in the Boston schools, and was still in use there when the writer entered them in 1801. It continued to be used until "An Abridgment of Murray's Grammar, by a Teacher of Youth"* was substituted, and the sale of the Accidence declined, until at the author's death in 1817, it was no longer an object for any one to print it. It was a very small book of 60 pages, and was probably only intended for an abstract of principles to be more fully explained by the teacher. This was the second American English grammar, Webster's having preceded it a year or two. The British grammar, a better book than either, had been re-

* Asa Bullard, probably, the successor of Mr. Ticknor, at the South Reading School.

printed in 1784, and Dr. Lowth's had been reprinted for the use of Harvard College, but they were little known, and not at all used in public or private schools.

Mr. Bingham and Noah Webster took advantage of the dearth of school books at the revival of common schools, which followed the war of Independence, and they fairly divided the country between them. Until their day, the only reading books used in the schools were the Bible and psalter, with such meagre lessons as were found in the New England Primer and the spelling books of Fenning, Moore, Dilworth and Perry which were successively introduced before the Revolution, but all superseded by Webster's or Bingham's soon after that event. Perry's *Sure Guide* was much used, and died hard, after having undergone a revision in the hands of Isaiah Thomas, Jr., a son of the venerable printer of Worcester. The New England Primer never deserved the name of a spelling book, but was probably valued and used for the abridgment it contained of the assembly's catechism, which was always formally taught in all the public schools of Massachusetts, until toward the close of the eighteenth century. It was disused in the Boston schools some years before it lost ground in the rural districts; but, even in Boston, it was retained in the private dame schools for young children, as late as 1806. Spelling having been left to the writing masters of Boston more than a century, it might naturally be inferred that the graduates of the schools were all bad spellers, but there is no appearance of any such deficiency in the manuscripts that exist, and the probability is, that, on the introduction of new branches of study, spelling became neglected, and this important and very difficult study never, probably, was in a worse condition than it is at the present moment.*

Our rivals both made reading and spelling books; and the reading books of Mr. Bingham far outstripped those of Mr. Webster, but the spelling book of the latter far distanced the *Child's Companion* of Mr. Bingham, which was a smaller book, and treated rather as an introduction to Webster's than a complete vocabulary. It was but little used when Mr. Bingham died, and now, like the *Young Lady's Accidence*, is merely a curiosity. The *American Preceptor* and *Columbian Orator* of Mr. Bingham contain few original pieces by him, but the selections were more lively than those of Webster, and better adapted to the taste of the community, which was not over critical or refined, and they held their ground, against all competitors for at

* The writer has, in his hands, letters from more than five hundred school committee men, and spelling exercises of more than five thousand teachers, male, and female, to corroborate the opinion above expressed.

least a quarter of a century.* The chief feature of Mr. Bingham's two books, was their original dialogues. Who wrote those in the *American Preceptor* is uncertain, but those in the *Orator* were mainly written by David Everett, a Dartmouth graduate, who came to Boston, and established the *Boston Patriot* some years afterward. He was no poet, but, in sport, wrote for the *Orator* that little piece, "You'd scarce expect one of my age, &c.," which has been the charm of the young American orators for half a century.

When geography began to be read in our public schools, and class books were read long before any lessons were recited or any maps used, Mr. Bingham prepared the small "*Astronomical and Geographical Catechism*," based upon Dr. Morse's *School Geography*, which was read occasionally by the highest class in the Boston reading schools. Many copies of the *Catechism* were sold annually, and, meagre as it was, it was the only book used, and was recited literally, without any explanation or illustration by teacher or pupil.

Mr. Bingham, in connection with his eldest daughter, published a small volume of "*Juvenile Letters*," a collection of familiar epistles between children, calculated to introduce them to the forms of letter-writing and English composition. He also translated *Atala*, an Indian tale by Chateaubriand, which is almost the only one of his works by which his style of English composition can be judged. Mr. Bingham was a good French scholar, and spoke that language fluently, but where he learned it is unknown. The translation of *Atala* was well executed, and several neat editions were printed and sold.

Mr. Bingham had a high reputation as a penman, and pupils came from a distance to receive lessons of him. He never taught penmanship after he entered the public service, but he retained a love for the art, and was often employed to open and ornament books of record, and to write diplomas. When Jenkins, the writing professor, published his system, Mr. Bingham did all the writing gratuitously. Soon after Mr. Bingham left the school in 1796, he published a set of copy slips, probably the first engraved slips ever published in America. The coarse and fine copies were in separate books, the former being engraved from patterns of his own writing, and the latter from those by the daughter before mentioned. They were both engraved by Samuel Hill, one of the earliest Boston engravers, but, though well done for the times, they would not be much esteemed now as patterns. Mr. Carter was far superior as a penman, but neither must be judged by the taste that now prevails.

* When the writer became their proprietor, they were little used, and he projected and published that series known as the *Pierpont Readers*, which for years had a run at least equal to their predecessors.

Mr. Bingham published no other work that can be called original. He republished an historical grammar, making some slight additions to adapt it to our schools. He published two or three editions of Sermons by Dr. Logan, a Scotch divine, and he edited an edition of the Memoirs of Stephen Burroughs. A publisher in Albany, hearing of his intimacy with the father of Stephen, the venerable pastor to whose church Mr. Bingham joined himself while at college, proposed to Mr. Bingham to edit an edition. Having more than doubts of the utility of such books, Mr. Bingham endeavored to dissuade the publisher from reviving what was passing into oblivion; but, when he found that the edition would be printed at any rate, he consented to supervise it, and inserted a few notes to explain circumstances, or to nullify the evil influence he feared. These are all the literary enterprises in which Caleb Bingham ever engaged as editor or publisher, and although they may seem mean by the side of some modern undertakings, it must be recollected that, although he may have stood second to Noah Webster, when they died, he long stood first in the number of books published, and always stood first in regard to the number published by himself. Moreover, it may be said that not one of Mr. Bingham's books proved a failure, while only one of Mr. Webster's, the Spelling Book, proved successful. Of course this remark does not include the Dictionary, which was published after the decease of Mr. Bingham, and owes its success more to others than to the industrious author.*

The success of Mr. Bingham's books, and the increase of vertigo and headache, no doubt brought on by the confinement incident to his vocation, induced him to resign his office in September, 1796, and though he lived nearly twenty years afterward, he never resumed the business of instruction in any form. He did not lose his interest in schools, however, for he not only visited those of Boston, but those of New York and other remote cities; and his store was, for many years, the head quarters of the Boston teachers. Brown who succeeded Bingham; Bullard who followed Ticknor; Little, who, with a short interval, when Crosby or Sleeper was master, was successor to Cheney;

* It is an amusing circumstance, and shows the uncertainty of biographical notices, that the excellent Dr. Allen, whose family was personally intimate with Mr. Bingham's, and who married a daughter of President Wheelock, to whom Mr. Bingham had been a pupil, assistant and amanuensis, in his Biographical Dictionary, improved edition, 1832, says of Mr. Bingham. "He published an interesting narrative, entitled *The Hunters, Young Lady's Accident*, 1789, *Epistolary Correspondence*, *the Columbian Orator*." The "Epistolary Correspondence" was the "Juvenile Letters" for children, and "The Hunters" was an anecdote of an accident that happened to Hugh Holmes, and an Indian boy of Moor's school. Mr. Bingham, for his amusement, wrote the story on a large slate, and the writer of this note copied it on paper, drew one or two embellishments for it, and printed it as a picture book for children. It never sold, although true, and very interesting. The style in which it was printed was a warning.

Snelling who followed Carter; and Rufus Webb who succeeded Vinnall, were all intimate with Mr. Bingham. The first set, also, kept up their acquaintance, and, probably, the second great reform of the schools originated at the book store, for to Elisha Ticknor, more than to any man, Boston owes the free Primary Schools, which, in 1819, superseded the little private schools, kept by women, in which the children of both sexes, for nearly thirty years after the great reform, were prepared to enter the reading and writing schools. Mr. Bingham was a great advocate for these primary free schools, and the counsellor whom Mr. Ticknor most highly esteemed; but both of the friends died before the schools were fully established.

As a bookseller, Mr. Bingham would not now be called enterprising. He printed his own books, which were so salable that he procured in exchange any thing else printed in the country. His sales of miscellaneous books were very limited, and his stock in trade what would now be called small. His store, No. 44 Cornhill, was a single room, not more than twenty by twenty-five feet, and most of the books upon his shelves were there the whole period of the writer's apprenticeship. He preferred to let publishers print his books and pay him a premium for the privilege; and from this source he received annually six or eight hundred dollars as late as 1816. In the transaction of his business he was perfectly just and liberal, but somewhat singular. This peculiarity consisted mainly in his unwillingness to incur any debt, or to have any thing to do with banks. The writer was seven years in his employ, and does not recollect ever to have seen a note of hand signed by him. The moment he commenced business, he felt the injustice of having an asking and a selling price, and he adopted the one-price system and adhered to it through life. Indeed, all the booksellers in Boston were induced, probably by him, to form an association, and, for twenty years, they had uniform prices and fixed rates of discount; an example that stood alone, and that no body of merchants at the present day could be persuaded to imitate. Mr. Bingham served several of the first years as secretary, the only officer they had.

The establishment of town libraries, to furnish suitable reading for the young, was a favorite design of Mr. Bingham, and a better selection of books could generally be found at his store than elsewhere, for this purpose. His advice, too, was relied on by town agents, and, although the number of libraries sold was not great, he supplied a goodly portion of them. When he wished to do something to evince his deep attachment to the place of his nativity, in January, 1803, he selected a library of one hundred and fifty valuable books, and pre-

sented them to the town of Salisbury, for the use of all children from nine to sixteen years of age. The donation was gratefully received and diligently used. Trustees managed the library, and the town, from time to time, made additions, till the volumes numbered five hundred. This was done at a time when a town library was a novelty, and the effect of this upon the citizens is thus described by Judge Church in his centennial address, (1841.)

"At that time, when books, especially useful to youth, were comparatively scarce, this donation was of peculiar value, and gratefully received by the town. It was a small beginning, but it infused into the youthful population a new impulse, and a taste for reading, before unknown, was soon discoverable amongst the young." A venerable minister of the town attributed much of that intelligence, which he claimed for the citizens of Salisbury, to the influence of their library; and the lady of a reverend librarian said with much feeling, "I recollect the joy we girls felt at having a library of our own; books to read of our own. What happy times! What friendly contests for this or that book on delivery days! The donor's memory was very dear to us all, boys and girls, men, women, and children." Mr. Bingham's letter, accompanying the donation, is almost an apology for the liberty taken. He says, "I well remember, when I was a boy, how ardently I longed for the opportunity of reading, but had no access to a library. It is more than probable that there are, at the present time, in my native town, many children who possess the same desire, and who are in the like unhappy predicament. This desire, I think I have it in my power, in a small degree, to gratify; and however whimsical the project may appear to those who have not considered the subject, I can not deny myself the pleasure of making the attempt." He concludes as follows: "Should it so happen that the books should be rejected, or there should be any disagreement, so that the object in view is like to be defeated, please retain the books till you hear further from me." This letter was written to his brother Daniel.

In 1793, before he was a bookseller, Caleb Bingham was the chief agent in establishing the Boston library, which, until the recent movement for a free library, was considered a most important institution. It was not free, however, except so far as that any citizen, who could afford it, might purchase a share, for about twenty dollars, and become a proprietor, paying an assessment of two or three dollars a year, to meet the expenses and secure an annual addition of books. Mr. Bingham had the initiatory meetings at his house, and officiated gratuitously, as librarian for about two years.

This library now contains about eighteen thousand volumes of valuable books, in French and English, and the proprietors have always been amongst the most intelligent and useful citizens of Boston. The library room was always over the arch, in front of the old Monument in Franklin Place, but the building, which is valuable, and belongs to the proprietors, is about to be demolished.

Mr. Bingham had some reputation as a singer, and took a leading part in the musical exercises when Washington visited Boston. He generally sat and sang with the choir wherever he worshipped. He was a religious man from his youth up, but he disappointed the expectation of his father's family when he opened a school instead of becoming a minister of the gospel. His faith was that of the orthodox congregationalists, and when that remarkable change came over the churches of Boston, which made them all Unitarian, he united with the few who remained true to their early belief, and endeavored to restore the ancient faith of the New England churches. Park street church was the result, and he was one of three who became responsible for the price of the land on which that church is situated.* But though so attached to his faith that he left the church of Dr. Kirkland, who was remotely related to him, still, neither doctrines nor forms could repress the natural kindness and gentleness of his disposition. He had true friends in every branch of the household of faith, and all men were brethren, and equal in his eyes, not because he was a republican in religion as well as in politics, but because he was a sincere and humble Christian.

He was a kind man, of tender feelings, and ready for any act of philanthropy. His pupils, many of whom still survive, speak of him with the greatest respect and affection. In the school-room, his discipline was steady but not severe, and when the school committee required the reading and writing masters to give their separate opinions in writing on the subject of discipline, all, except Mr. Bingham, declared that corporal punishment was indispensable; but even he was not sure that it could be entirely dispensed with, "*unless he could select his pupils.*" Three of the masters, Carter, Vinall, and Cheney, were early complained of for severity, notwithstanding the committee had enjoined upon them all to exclude corporal punishment from the schools, and, in no case, ever to inflict it upon females. The writer was present when Mr. Bingham undertook to punish the colored house boy for repeated and provoking misconduct. The boy, who was about ten years old, understood his master too well, for, although the flagellation was inflicted

* The price was about thirty thousand dollars; and the sureties, Mr. Calhoun, a Scotchman, William Thurston, a lawyer, and Caleb Bingham.

with a slender rod, and a reluctant hand, on a back well protected, the rogue screamed most pitifully. He did not shed one tear, but Mr. Bingham shed so many and suffered so much, that he soon concluded that, as he could not bear any more, the boy could not, and the offender was released upon just such a promise as he had made and broken a hundred times before. This kindness of disposition, devoid of such weakness, however, for the incident just related took place after Mr. Bingham had suffered long from the painful disease that shook his system, was especially shown, while he was a director of the state prison, by his endeavors to reform the criminals, and to procure employment for them after the expiration of their sentences. He was particularly interested in the younger prisoners, and procured the pardon of several on the promise to watch over and provide for them. He loved his immediate family, and was strongly attached to his kindred, however remote the degree, and many a mile did he go out of his way to visit distant and poor relatives, with whom he generally left a substantial blessing. He had no enemies, but, his politics, which were well known, though never offensively proclaimed, effectually prevented him from attaining to any other distinction in Boston than that of an honest man. His politics, as has been hinted, were those of the Jeffersonian school. He was a Republican when the opposing party were called Federalists; and few men of his party, in Massachusetts, were distinguished for wealth, talents or influence. His former position as a public teacher does not appear to have affected his standing; but it was evident that after the first, and, perhaps, the second race of teachers retired, the Boston teachers sank into a subordinate class, and no longer claimed respectability on account of their office. There was a falling off in quality, and nothing was done, intellectually, to command the respect of the community. A quarter of a century after the great reform, the association of teachers wished to make a public demonstration, but it was difficult to find a teacher who would attempt a public address, and that, finally delivered, had no claims to notice. For the first quarter of the present century we do not find the public teachers taking any part in literary meetings, or leading in any improvement, and it was not until the establishment of the English High School, and the marriage of one or two of the teachers into wealthy families, that an impulse was given to the whole body, which has gone on increasing, although this numerous and powerful body have not yet assumed the rank and influence to which they ought to aspire. The great fault of the Boston system and that of New England, is the control to which teachers are subjected. It is well that a committee should watch over the general

interests of the schools ; but it has always paralyzed them to have all the teachers subjected to any common plan, any fixed course of instruction. When the committee are satisfied with the moral character, intellectual attainments, and aptness for teaching, of any master, the responsibility should be laid upon him ; liberty should be given him to teach in his own way, and to alter and improve where he thinks proper. This has never been done ; but all have been stretched on the same bed, and cut down to the legal size, until the whole profession have been dwarfed, and an independent public teacher is a prodigy. But to return from this digression. When Mr. Gerry, contrary to the course of politics in Massachusetts, was elected governor, Mr. Bingham was appointed a director of the state prison, and so humanely and prudently did he discharge the duties of his office that he was allowed to retain it several years after his party went out of power. Mr. Gerry also appointed him a justice of the peace ; but he never acted as a magistrate except in the one case of riot which has been mentioned. During the war of 1812-15, the president of the United States appointed him an assessor of internal taxes for Massachusetts, but Mr. Bingham declined the appointment. For many years he was a candidate of his party, for the senate of the state, but, in those days, there was no third party, and he was never elected, though better qualified, probably, than any other man of his party in Boston, for any office in the gift of the people. The writer of these remarks was not of the same party as his master, but, as the bookstore was the head quarters of the Republicans, he had an opportunity to study the character of the leading men, and he feels a pleasure in bearing testimony to the perfect uprightness and disinterested political integrity of Caleb Bingham.

As a scholar Mr. Bingham took a respectable rank. When he graduated, the Latin valedictory was awarded to him. His classmates declare him to have been the best speaker in college, and, to the last, he was an excellent reader. For two years or more he taught Moor's school, in which youths were fitted for college exclusively. He was thought worthy to conduct Phillips' Academy, and, in Boston, he sustained the highest reputation as a teacher. He was a good French scholar, when French was not a common attainment. His English style was more pure than is generally attained by profound classical scholars, and his conversational powers were acknowledged, his language being always free from affectation, barbarisms, grammatical errors, and those inversions and involutions, that so often corrupt the style of scholars who attend more to other languages than to their own.

In his home, Caleb Bingham was an amiable, contented, cheerful man. The disease of which he died, dropsy of the brain, was probably induced at school, and troubled him more and more, until he was seldom free from headache and vertigo. The autopsy, which was conducted by his friend, the late Dr. George C. Shattuck, revealed an unusual degree of congestion, and led the witnesses to wonder that his intellect had never been impaired. The only thing that seemed to relieve him was travelling, and for many years he made long journeys about twice a year. In one of these he went from Boston to Niagara Falls, with his eldest daughter, in his own chaise. Bad as the road was in 1806, he went from Albany to the Falls in seven days and a half; and, while there, he measured the Fall by a line dropped from Table Rock, and, allowing for the inclination of the line and the shrinkage, the measurement did not differ essentially from the more scientific results of later times. On his return, he visited Red Jacket, who always addressed him by the French epithet *chanoine*, which indicates the impression that his personal appearance made upon that distinguished chieftain. But his journeys generally terminated at the homestead in Salisbury. His native town occupied a deep place in his affections. His father's farm was that delightful spot between Washining and Washinee Lakes, and after the death of his father, it was a great consolation to him to own it. The land and the improvements cost him more than he could well afford, and the necessity of curtailing the family expenses at home, led to some unpleasant complaints akin to reproaches; the farm having been purchased contrary to the wish of his family, and carried on without much regard to their advice. As an instance of his unsuccessful agricultural efforts, it may be mentioned that, when the speculation in Merino sheep commenced, he purchased six at a hundred dollars each, and after keeping them six or seven years, till the flock, pure and mixed, was reckoned by many scores, if not by hundreds, the whole were sold for about half the original outlay. Gentlemen farmers, who live remote from their farms, know how to account for this. Before his death, his books had become disused, and the copyrights of little value, so that they, with his stock in trade, farm, and other property, did not produce ten thousand dollars.

Mr. Bingham left a widow and two daughters. The widow survived him but three or four years. Sophia, the eldest daughter, was the highly educated and accomplished wife of General Nathan Towson, paymaster general of the United States army. She resided at Washington, D. C., and bore no subordinate part in elevating and refining the society of the capitol. She and her husband have both

died within a few years, leaving an only daughter, who married Lieut. Caldwell, late of the United States Army, and grandson of her mother's only sister. The second daughter of Mr. Bingham is still living and unmarried.

Notwithstanding his unremitted suffering, Mr. Bingham was a cheerful man, ready to smile and to enjoy the innocent pleasures which nature and society spread around him. His affability made him welcome everywhere, and his conversation, perfectly free from egotism and pedantry, was always pure, as well as interesting and instructive. The writer was in his family at least seven years, and never heard a profane or indelicate expression, or any thing that approached it, proceeding from his mouth; he wishes this example was more generally followed by teachers and those who claim to be gentlemen. That the tone of Mr. Bingham's mind was cheerful, appears evident from his compilations, which are lively, compared with many others even of the present day. The introduction of familiar dialogues, mostly original, was peculiar to him. For these he was chiefly indebted, as has been said, to David Everett, a Dartmouth graduate, who resided in Boston, and edited the Boston Patriot, in which enterprise Mr. Bingham acted as agent for William Gray, Jonathan Harris, Thomas Melville, Aaron Hill, Samuel Brown, James Prince, Gen. H. Dearborn, and Gen. Wm. King, who, with the exception of Benjamin and Jonathan Austin, were long the only Republican leaders in Boston. The two Austins were attached to the Chronicle, which it was the intention of the Patriot to rival, if not supersede. Both papers were afterwards ingulphed in the Daily Advertiser, once their most inveterate political opponent. Mr. Bingham wrote little or nothing for his reading books, and this probably through modesty, rather than any lack of ability. The moral character of Mr. Bingham's school books, and the decided stand they took in opposition to slavery, even at that early day, speak loudly and well for his principles as a Christian and a sincere republican. His remarks were often playful and witty, never severe or uncharitable. A sort of quiet humor, tempered by the spirit of kindness, often appeared in his conduct and conversation and compelled his hearers to smile. The writer may be pardoned, if, to illustrate this peculiarity of his venerated master, he relates a circumstance that happened in his presence, not many years before the decease of Mr. Bingham. Something had corrupted the water of the well attached to the house, and the inmates agreed, one and all, to pump it dry, each pumping a large tubful in turn. Mr. Bingham being the eldest, began just at nightfall, when nothing was distinctly visible in the pump-room. He was so long in

filling the tub, that his wife began to joke at his expense, saying, among other things, that she could fill it in half the time. When it was full, and her turn came, Mr. Bingham turned out the water, and, unperceived by her, trod out the bottom of the tub. The sink was so far below the level of the floor that the bottom of the tub could not easily be felt, and Mrs. Bingham, conscious of all she had said, began to pump with alarming vigor. When, somewhat fatigued, she stooped and felt to ascertain how high the water had risen in the tub, but not feeling it, and unwilling to appear to flag, she went at it again with desperate earnestness, stooping ever and anon to seek encouragement in the rising of the innocent fluid. She pumped long, but exhausted her strength before the water failed. She bore the joke very well, but not so well as her husband and the rest of us did.

For two or three years previous to his death, Mr. Bingham paid less and less attention to business. The pain in his head was always present and often very intense, and it was a painful circumstance to us all, that, as he drew near to the shadowy vale, he could find no comforting staff in the faith in which he had always walked. His constant fear was that he should be a castaway, and a deep feeling of personal demerit seemed to add untold weight to his physical debility. The encouragement of his friends only seemed to add to his distress, and when the writer of this sketch remarked to him that "if he had no hope in death there was no hope for any one," he reproved the speaker for supposing that he had any claims to merit, and began plaintively to sing his favorite hymn :

"God of my life, look gently down,
Behold the pains I feel;
But I am dumb before thy throne,
Nor dare dispute thy will."

Happily for all concerned, the darkness began to disperse a day or two before he died; and when death came, he was no longer to him the King of Terrors. He died in peace as he had always tried to live, and the last duties were performed by the writer and Hiram Bingham, then a student at Andover, and providentially on a visit to the family. This event took place on the Lord's day morning, April 6th, 1817, and the body was afterwards deposited in the family tomb of his wife, on Copp's Hill, at the north part of Boston.

II. PUBLIC INSTRUCTION IN SAXONY.

BY HERMANN WINNER, PH. D.

THE public schools of Saxony may be divided into "*Volksschulen*," i.e., people's schools or common schools, and "*Gelehrte Schulen*," literally, learned schools.

The Volksschulen comprise, 1, village schools; 2, burgher schools; 3, normal schools; 4, higher burgher schools or real schools; 5, industrial schools, culminating in 6, polytechnical schools, which include the academy for miners in Freiberg; academy for agriculture and forest concerns in Tharand; academy of arts and polytechnic in Dresden, etc.

The Gelehrte Schulen embrace the gymnasia, with the progymnasia, and the university in Leipzig. These are called, also, "*Hochschule*," i.e., high schools.

In another sense the public schools are divided into (a,) *niedere*, (i.e., lower,) *volksschulen*, or simply *volksschulen*, viz., village schools, common burgher schools, (with the teachers' seminary at the head;) (b,) *mittelschulen*, middle schools, viz., real schools or higher burgher schools; industrial schools; gymnasia; and (c,) high schools or academies, viz., the university, the polytechnical school, and other professional academies.

We shall view the schools in the order mentioned first.

1. COMMON SCHOOLS.

1. Village schools, (*dorfschulen*.) They are attended by the children of the parish from their sixth year of age, when they become *schulpflichtig*, (i.e., due to school by law,) to the fourteenth or fifteenth year,—full eight years,—in which they are, after three to six months' instruction in religion by the parish clergyman, "confirmed" as Christians, and, after that, for the first time, admitted to the Lord's Table. This act implies dismission from school, which takes place a few days before or after the confirmation. The children of the clergyman are generally educated by himself at home; those of the "gentlemen," first by a governess, then by a tutor or in a boarding school. In larger villages or small towns, where there are more families of some rank, a little private school is frequently established by them and kept by a candidate of theology, or a candidate for the *schulamt*, (i.e., school office, employment;) or a graduate of the normal school; rarely by a candidate of the higher "*schulamt*," or graduate of the university, who has passed his examination for teaching in gymnasia, real schools, etc. By the *common school law* of Saxony, drawn by the late Dr. Schulze in Dresden, and passed in 1835,*

* *Das Elementar-Volksschulgesetz für das Königreich Sachsen, nebst Verordnung vom Juni 1835, von Dr. G. Schulze*, Dresden, 1835. pp. 236. For the law see p. 32. The ministerial ordinance belonging to it, pp. 117. Its appendix includes Pedagogical literature, School

the village schools since then, are divided into two separate classes, of which the higher is generally instructed in the forenoon, (7-11;) the lower in the afternoon, 1-4, except Wednesdays and Saturdays, when there is no school in the afternoon, and the two classes are successively instructed during two hours each in the forenoon. If there are more than one hundred and twenty children, sixty to each class, an assistant teacher must be appointed.*

Attendance is enforced by law, (by fine,) and the teachers are obliged to deliver, at the end of every month, a list of non-attendants to the school committee. The latter consists of the parish clergyman, called local school inspector, the magistrate of the village or town, and at least two more elected parishioners or councilmen. Of course the clergyman is the chief inspector and visitor. But he is also in this quality subordinate to the "Superintendent" or ecclesiastical superior of the district, who is, at the same time, chief minister in the largest town of a certain section, and inspector of all churches and schools in that district. The higher boards are the "*Kreisdirection*," i.e., government of the circle, (Dresden, Leipzig, Bautzen, Zwickau,) presided over by the church and school counselor attached to it; and after that, the ministry of ecclesiastical affairs and of public instruction, and especially the privy church and school counselor, charged with the common schools.

The school money paid by the parents of each child attending school, is, lawfully, one groschen a week, but in many cases reduced to one-half or two-thirds. This amount will be increased by the present law. Since a regular compensation has been settled on the teacher, this school money is collected by the village, and the teacher paid out of the school funds of the parish. In a village with a church, and, in former days, only such had a public school, the schoolmaster is, at the same time *cantor*, (*chorister*), organist, sexton, and, in such quality has, besides his free dwelling in the school house, (which he has in all cases,) the use of some land, some money from every house in the parish, some income from marriages, baptisms, funerals, etc., and, in former times, other emoluments, as loaves of bread, billets of wood, &c. But these are now all settled in money. Good places are worth from four to five hundred thalers; the best, perhaps, seven hundred. The lawful minimum is one hundred and fifty thalers, increasing after every fifth year, and raised from time to time by

houses and school-rooms, with four cuts; female handwork; Sunday Schools; infant school; school tables and registers; index. Many German states, as Prussia, have no such law yet; but a collection of decrees, ordinances or regulations. In Prussia, the three regulatives of Oct. 1864, are the last and the most remarkable.

* In Prussia, a great many schools, especially in the province of Saxony, have had the same departments which had been in use in many of our schools a long time before 1835, but others, as well here as there, were one-classed schools, where all the children attended together during all school time. It was proposed by many influential men, e.g., by Goltzsch, principal of the normal school in Stettin, to establish in Prussia too, throughout, two classes, but in the regulatives, the minister says that he has no reason to make any change, but that he wishes all children to attend together in one room. This, therefore, is henceforth, (i.e., until recalled by some other regulative,) to be considered as the legal rule in Prussia, and all new school houses must be built with a room large enough to accommodate all children.

law. Since money is rapidly increasing in value, the fixed sum is no longer equivalent to what it was fixed for, nor to the wants of daily life; hence the "*Lehrernoth*," i.e., want of teachers, (active and passive,) is fast increasing, but more so in other parts of Germany; as in Prussia.

The schoolmaster, like the clergyman, is appointed either by the government, or, where a manor exists, by the lord of the manor; but, when once appointed, can not be removed unless for a flagrant crime against morality or government.

Religion, reading, writing, and arithmetic, are the principal objects of instruction. Geography and history are commonly confined to the knowledge of Saxony and Germany. This, as well as the scanty instruction in the fields of nature, is generally got from the Reader. Reading is taught by the "*Lautirmethode*," writing by copies, (by the black-board,) or in connection with reading; arithmetic by a combination of slate and mental arithmetic.

In former times the school was almost exclusively in the parish village; the children of other villages had to walk to that parish school. But, fortunately, this has been altered, in the most urgent cases, by building by-schools, *nebenschulen*. In such villages as have become too extensive, two or three miles long, another school is established at the side most distant from church and school.

The school year commences the Wednesday after Easter, with vacations, at Whitsuntide of three days, at Easter and at Christmas of eight days, and about two weeks in harvest time. There is no difference between winter and summer schools, as in many villages of Prussia.

2. BURGHER SCHOOLS or town schools, (*burgerschulen*, *stadtschulen*.) These are divided into boys' and girls' schools, and each of them in smaller towns into three or four separate classes, instructed by the rector or principal, by the cantor, organist, sexton and other teachers. Larger towns, such as Dresden, have as many burgher or ward schools as are wanted in proportion to their extent, with a great number of teachers that have no connection with the church, but are under the inspection of the clergyman. Here, especially in smaller towns, the class system exists to its fullest extent; that is the rector is the only teacher of the first class, the cantor of the second, etc. In the larger towns, with more than three classes and teachers, teaching according to branches is practiced to some extent; that is, a certain teacher gives instruction in geography and history in all, or at least the higher classes.*

Boys and girls are generally mixed in the elementary class, and, though they are, after that, separated in different schools, the rector is nevertheless principal of the girls' school also. Sometimes, with a large number of pupils, parallel classes are established. *Leipzig*, with about 40,000 inhabitants, had, at first, owing to the small compass of the city, one burgher school with many separate classes for boys and girls. The in-

* Nowhere, not even in the higher institutions, where the class system prevails to a greater extent, except the university, is it applied to such a degree as, e. g., in the High School of Philadelphia.

crease of population, (70,000,) and of houses, then caused the erection of a second burgher school, with a vice-principal. This possible concentration of the burgher school in a wealthy and intelligent town, together with the great merits of Dr. Vogel, well seconded by a liberal council, which permitted the permanent employment of graduates of the university, caused its high standing. Since then, a third burgher school has been founded with an independent principal, and a fourth will, before long, follow. The school rate is highest in the first burgher school. Besides, there exist two municipal poor schools, (*armenschulen*.) Dresden, with 108,000 inhabitants, has, besides four poor schools, three burgher and five district or ward schools; (the school rate making the chief difference,) all of them nearly equal.

Most of the teachers in the burgher schools, and all those in the village schools are graduates from the normal schools.

The legal school time is here, as elsewhere, eight years. Private instruction at home or in schools is allowed, but no one, except such as are prepared for teaching, (i.e., clergyman or teacher,) is permitted himself to teach his children without the help of the school or a proper master.

Methodology is most advanced in these schools. For, in general, it may be said that pedagogy, or the art of teaching, has been investigated and improved, especially in and for the common schools, among which the village schools can not have either a full sway nor the best men; whilst, on the other hand, teaching in the higher institutions, either based on the indelible source of formal instruction, the classics, as in the gymnasias, or destined to the acquisition of real and positive knowledge, neither needed the same degree of efforts in this respect, nor even admitted such essential changes as the common school teaching has passed through. The normal schools have been, in modern times, the foci of pedagogical improvement, whereas the universities, where the rest of the teachers are educated, with all their seminaries and professors of pedagogy, offer more of literal and scientific than of pedagogical education. All this I have said in appreciation of the pedagogical progress in common schools and of the normal schools, not to the disparagement of our excellent institutions of a higher grade; and, it may be remembered, that nearly all teachers of the normal schools, as well as most of the leaders in our pedagogical literature are graduates of the gymnasias and universities.

8. THE NORMAL SCHOOLS, or teachers' seminaries. Of these, two are in Dresden, and one each in Plauen, Grimma, Annaberg, Bautzen, Nossen instead of Freiberg, in all seven. They are now all internates or boarding schools, in former times partly day schools. For admission, once a year, such a preparation is needed as is not required in a common burgher school; hence "Pro-seminaries" of a half private character, are generally established in connection with the normal school. The course comprises four years. Besides religion, music is an essential branch, as it is needed by a country teacher who is attached to a church, as most are, and all wish to be, since he leads the choir, plays on the organ, etc. The teacher-pupils rise at five; in winter at half past five; and go to

bed at half past nine or ten. The lesson or study hours are, 5-6, 11-1, (12-2,) and two hours in the evening; once a week a common walk with one of the teachers. Permission to go out is very rarely given, and only in those hours, but never after supper. The pupils of the two lower classes are not permitted to give private lessons, and the others but exceptionally, and in case of great ability and dignity. Prayer in the morning and evening, particularly so on Monday morning, in presence of all teachers and pupils, including the children of the school of practice.

Branches of instruction: 1, religion, in connection with 2, catechetics; 3, German; 4, geography and history; 5, natural philosophy and history; 6, arithmetic; 7, elements of geometry; 8, pedagogy; 9, penmanship; 10, drawing; 11, gymnastics; 12, music. But of the branches taught until 1857, no time is henceforth to be allotted to Latin and logic; no particular time to psychology, common school knowledge, and methodics; which are to be connected with pedagogy and practiced in the *seminarschule* or school of practice. The teachers of the normal school, obliged to twenty-six hour lessons a week, are, at the same time, teachers of the school of practice, (in two or three classes, with no more than forty or fifty in each class,) together with the pupils of the two upper classes exclusively, and in presence of a teacher.

Vacations: three weeks in summer, in dog-days; and one week at the three great festivals, (Easter, Whitsuntide, Christmas.) The study hours of the evening must be devoted to a *review* of the day's lessons; those of Saturday to a review of the week's lessons; and the teachers have to review with the pupils, not only at the close of any convenient section, but regularly at the end of every month.

A normal school for *female* teachers has been lately established in Calenberg, (by the munificence of the prince of Schoenburg, the same who has founded before the female normal school in Droissig, in the Prussian province of Saxony,) and admits young ladies of seventeen to twenty-five years of age. The length of the course is not yet fixed. Families and principals of private schools are allowed by government to employ the graduates of that school: the former, (the families,) for educating their children until the tenth year of age, without distinction of sex, in all branches; but from the 10th year, only for their *girls*, in all branches, excluding religion. The latter, (private schools,) may employ them only for teaching their *female* pupils in the lower and middle class, and in the latter class with the exception of religion. Whether and to what extent they may be employed in public schools, (i e., either in girl schools, or in elementary classes of mixed schools,) will be later determined by our government, after some more observation and experience. I may add here, that, in some districts of Prussia the government has been compelled, by want of teachers, to establish normal courses of *one* year, instead of the usual three.

4. REAL SCHOOLS, (higher burgher schools.) These are of a relatively new date. Formerly, all boys of the middle classes in towns,

with the means needed for a better education, were sent to the old Latin schools; more recently to the lower gymnasium, (*Quarta* and *Tertia*, with the *progymnasium* or *Sexta* and *Quinta*,) and were equally instructed with such boys as had to acquire a classical education for professional studies in the university. Peace and the increase of wealth, together with the increased demand for an education in modern languages and mathematics, called forth the frequent establishment of these schools, (corresponding to the English "high schools.") Where an actual real school was not yet possible, parallel classes were joined to the gymnasiums. In these the first real class corresponds to the second class in the gymnasium. Instead of Latin and Greek, other branches are more particularly taught,—some in common.

Even in Saxony, the real schools are of a somewhat different stamp and standing; but all have the same object, of giving a higher education to such as do not want a classical education. In some modern languages, i.e., French and English, prevail more than in others; but German, mathematical and natural knowledge, history, geography, and drawing, are essential branches in all. These schools have no systematical connection with the burgher schools, as has, *e. g.*, the Free Academy in New York. They admit boys of all ages and towns, if they pass the examination, which requires a good elementary education. But this point has been often reached by boys of good family, with the help of private tuition, at the eleventh year, as well as by others at the fourteenth. This was, at least, the case hitherto, and a boy destined for a higher education is expected to be early in advance of his common school brethren of the same age. For this purpose schools of a higher aim have generally preparatory classes, so that many gymnasiums are frequented even by boys of eight years in a fifth or sixth class, whilst the gymnasium contains properly but four classes.

The real school in Leipzig is divided into four classes, the last of which comprises boys of eleven to fourteen years. Other real schools go further down, and thus serve as common schools. The complete Prussian real schools have six classes, even with a two years' course in the highest. There has been, as yet, much experimenting with this sort of schools, or, rather, in every state, province, or town, that organization has been adopted which seemed best according to the views of the chief founder, or best adapted to the wants of the inhabitants, or, under unfavorable circumstances, the only practicable one. In Prussia the Latin has been retained, (in some schools only in the lower classes;) in other states, (Saxony,) it is entirely superseded by French and English; in Austria neither is Latin taught, nor is French or English obligatory; and mathematical, technical, (drawing,) and natural knowledge are the chief points.

The real schools are, generally, a part of the burgher school system in the towns, and hence supported by the school money paid by the pupils, and if that does not cover the expenses, by the municipal council. Only

when they are a collateral branch of a royal gymnasium, do they stand immediately under the government.

The "*höhere tochtterschulen*," (higher girls' schools,) are co-ordinate to the real schools, though rather rare as yet, and established only by wealthy municipalities or by private enterprise.

There is another class of schools which come very near the real schools, though they have a more professional denomination. I mean the *commercial schools*, *handelschulen*. In all of them modern languages, with letter writing, arithmetic, book keeping, laws of exchange, etc., are the chief branches. The two largest are in Leipzig and Dresden, partly preparatory, aiming at the same higher education for which the real schools are founded, and partly for mercantile apprentices, who are, by the recent resolution of the corporation of merchants (in Dresden, etc.,) which founded and supports the school, obliged to attend, during their apprenticeship, (generally four years,) for several hours a day. Smaller towns, e. g., Zwickau, Grimma, etc., follow the example, and have imposed the same obligation. Many or most boys of the real school, e. g., in Leipzig, are preparing, too, for a mercantile pursuit.

5. INDUSTRIAL SCHOOLS, *gewerbschulen*. There are technical institutions, preparing for mechanical and chemical trades, commonly with the addition of a school for journeymen masons, and carpenters, architectural,) and also for journeymen, i. e., such as have finished their apprenticeship in other trades, (millers, dyers, tanners, etc.) The lower classes are attended also by such as want a real education of a more general kind, (German, French, drawing, mathematical and natural science.)

We have had such schools in the industrial districts of Saxony, (Chemnitz, Plauen, Zittau,) but by far the best, and now, I hear, the only one, in the first named greatest industrial town of Saxony, (for machine building, cotton weaving, dyeing, hosiery, etc.,) which, on this account, has no real school. Drawing, chemistry, and machine building, are the chief branches, with an agricultural department. The school has two collateral courses, of which the one is for machinists, and has one class more than the other, which is for chemistry, (agriculturalists,) etc.*

The industrial schools of Prussia have a lower standing and somewhat different organization: the real schools of Austria, with their technical character, are somewhat similar.

It must be mentioned in this place, that our *Sunday Schools*, established in most towns, are for apprentices and journeymen, and to afford a more practical education. Hence they are essentially drawing schools.

Besides, we have, in the mountainous districts about Chemnitz, Annaberg, etc., a considerable number of schools for *lace making*, lately improved and increased by government. But I am not aware that many industrial schools of this kind, though they abound in Belgium, do exist in Saxony for any other manufacture. *Freiberg* has a *sewing school*, with one hundred and twenty girls, from the seventh year upward; yearly income four hundred thalers. And a straw working school, with one hun-

* For the plan of lessons see American Journal of Education, Vol. IV., No. 10, p. 252.

dred and eighty children from the fifth year of age, (two-thirds boys,) who earn five or six groschen a week,—both supported by the "*Frauenverein*," ("female association.")

Improvement in agricultural concerns is cared for by economical associations of the various districts, (exhibitions, etc.,) which I should not mention here, if they had not made a beginning in influencing the schools by establishing, in connection with some village schools, additional lessons in natural knowledge, granting physical apparatus, etc.

Arboriculture and horticulture have been taught hitherto in many village schools, and should be in all.

6. THE POLYTECHNICAL SCHOOL. Besides the polytechnic school, properly so called, (for engineering of all sorts and chemistry,) it comprises an architectural school, (*baugewerkschule*,) and a school for drawing and clay modeling, (*zeichnen und thonmodelliren*.) The lessons of the last division are exclusively devoted to these branches; in two sections, with two teachers, (from eight to twelve and two to six;) those of the architectural school in three classes, (*repetenten*, higher and lower,) comprise:—ornamental and architectural drawing, architecture, doctrine of projection, perspective, machinery, mathematics, German, natural philosophy, carpentry, masonry, and engraving, (lessons from eight to twelve and two to four, of two hours each,) with seven teachers.

The proper school consists of a lower, (three classes,) and a higher division, (two classes,) the latter of which is the highest technical academy in Saxony, with twenty-one teachers. In the lower division (from eight to twelve and two to six; with from seven to eight in the morning, on most days, for French and English.) The studies are German, French, English, algebra, stereometry, analytical geometry, experimental physics, mechanics, mineralogy, projecting, theoretical and technical chemistry, engraving, (*steinschnitt*,) mechanical technology, perspective, general architecture, ornamental and architectural drawing. In the afternoons of most days, surveying, projecting of parts of machines, and chemical exercises in the laboratory.

In the higher division: (from eight to twelve and from two to six; and on four days also from twelve to one for English;) the studies are higher mathematics, physics, practical economy, book keeping, English; projecting of machines, mechanical technology, mechanics, astronomy, geodesy, building of bridges, etc.; geognosy, drawing, chemical exercises. There are, at present, in the higher division about twenty students; in the lower about sixty. The architectural school has eighty-three, and the drawing school thirty-one pupils.

7. THE MINING ACADEMY in Freiberg, (founded November 13th 1765,) with fifty students from Saxony, fifty more from the other German states, and twenty-seven from all parts of the world, viz., seven from England, seven from the United States, two from Chili, one from Mexico, one from New Granada, one from Cordova in South America, one from Smyrna, one from Florence, one from France, one from Belgium, one from Servia, one from Moscow, one from Warsaw, one from Lemberg,—one hundred

and twenty-seven in all, more than ever before,—with ten professors, (Breithaupt, Scheener, Plattner, Cotta, junior, etc.)

8. THE ACADEMY FOR AGRICULTURE AND FOREST concerns in Tharand near Dresden, a well known school of good reputation, (Cotta,) with about one hundred students of various nations.

9. THE ACADEMY OF ARTS in Dresden, (Schnorr, Bendemann, Rietschel.)

10. THE MUSICAL OBSERVATORY in Leipzig, (Mendelssohn.)

11. THE SURGICAL ACADEMY in Dresden, training surgeons for the army, and "*medicinae practicos*;" but not doctors of medicine. These must have studied their medical (and surgical) course in the university.

12. THE ARCHITECTURAL SCHOOLS, in connection with the polytechnical school in Dresden, and with the industrial school in Chemnitz.

II. LEARNED, OR SUPERIOR SCHOOLS.

THE gymnasia, with the university at their head, are the seminaries of classical and philosophical learning for all such as wish to be clergymen, physicians, state officers, judges, and teachers of higher grade. For the course in the gymnasia may be substituted private education; but this is a rare case, since the unavoidable examination in one of them for entering the university, (the *abiturienten-prüfung* or *maturitäts-prüfung*,) makes it more than desirable to have gone through all, or, at least, the higher classes of the gymnasium. A final attendance at least, on the university of Leipzig is obligatory on every Saxon student, with papers from any other German university, which has been attended, certifying such attendance. No one is forced to the examination, or to leave the university, hence we have had some rare specimens of the "old" and the "oldest" student in Germany. Foreigners and others without any professional pretension in Saxony, may be more easily matriculated, and are always allowed to attend the lectures.

Now let us look more closely at these institutions.

The *gymnasia* of Saxony are eleven;—two in Dresden, two in Leipzig, one each in Plauen, Freiberg, Zwickau, Bautzen, Zittau, and two royal boarding colleges or "*Fürstenschulen*," viz., in Meissen, (Misnia,) and Grimma. The latter are the oldest, together with "*Schulpforta*" near Naumburg, (since 1815, a Prussian city) are of old celebrity. They were founded at the time of the Reformation, in secularized cloisters, and have remained until this time, boarding schools of about the same character. Their students are most of them free scholars from all parts of Saxony, according to a strict distribution of districts and towns. Such scholars cost the institution about a hundred thalers each, yearly. The expenses of the others are, of course, two or three times that sum. The chief teachers of these schools have the title of professor. After that pattern the other gymnasia, (all open day schools,) were organized out of the old Latin schools. Most of them, i e., all those which pressed too heavily on the municipal funds of the respective towns, by an increase and better pay of the teachers, have lately become governmental schools, yet without differing from their richer municipal sisters in Dresden and Leipzig. Of these gymnasia there are two; the Cross-school at Dresden, and the Thomas-school in Leipzig, which have a large number of free scholars

boarding in the school, who form the choir of the Cross-church and St. Thomas church, and attend all ceremonies connected with it, as public funerals, etc. All others pay for their attendance, in progression, from sixteen to twenty-four thalers a year. The Vitzthum gymnasium in Dresden is a private foundation, and free for all boys of the Vitzthum family, and, for as many other poor boys, who are admitted by the administrator of the foundation, a Count Vitzthum. They are all instructed, fed, and clothed. Being, naturally, for a limited number of scholars, it could not well exist of itself, though the capital had lain two hundred years, and thus it came into life through Blochman, in 1829, with whose private institution it was conjoined in 1829.*

I have mentioned before that a gymnasium contains properly but *four* classes, which are, however, subdivided in Upper and Lower Prima, (the first and highest,) etc., which are combined only in several scientific subjects, or, sometimes, not at all, so that a gymnasiast has, in fact, to go through eight classes. To those four chief classes, in many places, preparatory classes are added, with or without the name of progymnasium; hence we meet, very often, with a Quinta and Sexta, (sometimes again subdivided,) in which boys are found from nine to thirteen years. There is no regular year's course in the public gymnasia; a "translocation" takes place at Easter and Michaelmas, but only the higher forms, or the better portion of the class, is transferred. The average time for passing through the four classes of the gymnasium, is six years: but since feeble scholars have, with this kind of translocation, little chance even of mastering all the studies to this point, in many schools the entrance of the upper gymnasium, (i.e., of lower Secunda,) is made more or less decidedly a stumbling-stone for such as are considered not talented enough for studying, as it is generally called, *i.e.*, for finishing their classical course and studying a profession in the university. Those who have come as far as Prima, will always pass successfully their final examination, when admitted to it. That is, the private examination; for the public examination of the various classes at Easter is rather an exhibition,—at least I know of no case to the contrary; though the certificate then given, bears testimony to the degree of the scholar's maturity, viz., *satia*, (3.) *omnino*, (2.) or *imprimis dignus*, (1.) There is no such distinction in Prussia; the certificate only saying, "mature."

Each class has one chief teacher, called the "Ordinarius" of that class, who gives most lessons in it. However, it is not confined to him, since, perhaps, besides one or two more teachers even in classics, it often studies mathematics, religion, French, and also history, with as many different teachers.*

* It may be proper to mention here, that a second public gymnasium was intended for Dresden, by the municipal council, by making the well known private gymnasium of Dr. Krause a public concern. But since his pupils are prepared just in the same way, so far that on leaving Prima, (class first,) they pass their examination successfully elsewhere, (in Saxony or Prussia,) he refused the honor, because he did not wish to give up his right of appointing his own teachers.

† Some weeks ago, a number of citizens of the university town of Marburg in Hesse Cassel, petitioned government to have but twenty-four lessons, (one hour each,) a week pre-

The gymnasia are, as is well known, pre-eminently classical schools, two-thirds of the thirty lessons being devoted to Latin and Greek. Formerly the classics were explained in Latin in *Prima* and *Secunda*, but the custom of speaking Latin is gradually dying out; yet writing Latin in translating and free compositions, is still, and will be, for a long time to come, a chief point. The writing of Greek is confined to translating from the German, and, chiefly used for impressing, more decidedly the manifold niceties and intricacies of Greek grammar. Since the time which called forth the organization of real schools, a continual warfare has been going on between classical and "real" education; and, in the year 1848, (some years before that time an oppositional association, the "gymnasial verein" in Dresden, had been founded and most skillfully conducted by Kochly, then teacher of the gymnasium in Dresden, and, since 1849, professor of classical literature in Zurich,) when all the elements of the opposition came to an outbreak and gained the victory, and the gymnasia seemed to be on the eve of giving up their old classical character and fame. Though, however, many improvements were made in consequence, especially in allowing more space to mathematics, and in sweeping off a good deal of philological dust by a more cursory and less stationary method of reading, still the gymnasia remained chiefly devoted to classical learning. It has become the general opinion, that the founding of the real schools places the gymnasia in a proper and fully justified position, since they serve no longer as high schools for all, and should be no longer exposed to the enmity of those who want another education for their children, because the latter have now but to choose between a real school, a commercial school, or an industrial school.

To give an idea of the number of persons connected with a gymnasium, I take the first report at hand of the gymnasium in *Plauen*.

I find there:

(a.) Schul commission, (school committee;) including (1.) the superintendent (of churches and schools in the diocese) of *Plauen*; (2.) a city counselor, (lawyer;) (3.) another city counselor, (a bookseller;) (4.) an attorney.

(b.) Teachers:

(1.) the rector; (2.) the conrector, (subrector, prorector;) (3.) the collega III., called *Tertius*; (4.) collega IV., called *Quartus*; (5.) collega V., or *Quintus*; (6.) the mathematicus; (7.) the teacher of religion. (All these teachers are called professors in *Meissen*, in *Grimma*, and in all gymnasia of Southern Germany;) (8.) the teacher of French; (9.) the *Colaborator* or *Adjunctus*. In schools with many pupils or more classes the number of *Adjuncti* is increased *ad libitum*.* The number of students varies from one hundred and twenty to three hundred.

scribed in the gymnasia, with only four prescribed (not optional) studies, viz., Latin, Greek, history. (with geography,) and mathematics, which should be the only subjects of examination; further, that all these branches should be taught in the lower classes by the "Ordinaries" of each class, and likewise in the higher classes, but these, with the exception of mathematics; finally, that opportunity should be afforded to learn the modern languages, but at the option of the parents.

*The gymnasium in *Stuttgart*, (Wurtemberg,) with five hundred pupils, has ten classes,

In calling the gymnasia by an American name, the American travelers do not agree: some compare them with their colleges; others call them grammar schools, probably with the old meaning of the term, as corresponding to the Hopkins Grammar School in New Haven, etc.; and Bostonians are reminded of their Latin High School. Now, taking all essential points into consideration, it will be found that our upper gymnasium with students from fourteen to fifteen or twenty years of age corresponds to the American college, and that only the senior year in those colleges where the study of classics is *considered* as having been completed in the junior class, (as in Amherst and others,) and entirely superseded by philosophical and scientific studies, can be compared with the propædæutical or philosophical course of a first year of university life, (as that course should be, though it is generally very incomplete.) The senior year corresponds better to the intermediate philosophical course in a Southern German "lyceum" or "philosophical institution." The latter, however, are rather rare even there, and do not exist at all in Northern Germany. But in fact that difference with regard to the senior class is merely negative, since the classics are no longer taught there, though not previously pursued to the point to which our *Prima* aspires; and since the sciences, which are more slighted here, as a general thing, are thought there of paramount importance. Some sciences, as natural philosophy, are taught here in all gymnasia; others, as mental philosophy, the encyclopædical elements of philosophy, etc., in most gymnasia of Germany, (Prussia, Wurttemberg, etc.) But that falling off of classical studies in the senior class, (a review of the last term is a mere refresher of memory,) spoils the classical character of the American colleges, and, since the three lower classes are devoted to classics, spoils the very progress and advance of those studies; for, the last year of the course impresses its stamp on the whole; and the freshmen are looking up to the seniors as to so many of their own school, who have fortunately done with the childish work of studying Greek grammar and making Latin translations. Unless the classical studies are really considered as finished before, (but no American professor of my acquaintance would say that,) the time for other, perhaps not less necessary, and even more practical, studies, should not be gained by doing away with the classics, but rather by increasing the number of daily recitations in all classes from three to four. Still, I may be mistaken. The chief point which constitutes the similarity of these schools is, that they prepare for professional studies, by giving a general scholarlike education, by which, *e. gr.*, lawyers and physicians, in spite of their very different career, recognize each other still as "scholars." The difference lies in the method of instruction,—here more teaching, there more reciting; in the mode of transfer

(and, on account of the overplus, as many parallel classes; in all twenty,) four of which constitute the upper gymnasium, (130) pupils for students above fourteen years; three the middle, (170,) and three the lower, (200.) I. class, twenty-four hour lessons; II. 26, etc. In the upper gymnasium there are, besides the rector, seven professors and three teachers; in the middle and lower, sixteen teachers. The Frederic Wilhelm's gymnasium in Berlin has, at present, 600 pupils in twelve partly parallel classes.

through classes, which is there by annual courses, here, in general, by a greater regard for proficiency; and in the number of lessons,—there eighteen a week, here, on the average, twenty-eight to thirty.

An "Actus" closes the career of a gymnasiast who has passed his *abiturienten* or *maturitats*-examination. That actus resembles, in all chief points, (orations, poems, etc.,) the commencement of an American college, without being, though, of such social importance or pretension. We know that there are no "graduating classes," (sometimes only six graduates in a gymnasium of one hundred, and seventeen in one of four hundred,) and, it will be silently understood, that there are no "debating clubs," nor "literary societies," of the American kind, which prolong their life even beyond their college time, by annual feasts, interesting catalogues, etc. But with us, the university life, in consequence of its liberty, so much of which is never enjoyed before nor afterward, absorbs all the interest of a student's career; and all trace their general knowledge back only to these schools.

2. *The University.* A German university in its striking peculiarity, is too well known abroad, to require any further explanation. Let me repeat here, in a few words, that it is a professional institution in four "faculties;" the theological, juridical, medical, and "philosophical," (comprising all professors of mathematics natural sciences, classical literature, history, etc.)

Saxony has, at present, only one university, that in Leipzig. In 1815 the greater part of Saxony, viz., the electoral district of Wittenberg, to which the name and dignity of "duchy and electorate of Saxony" had been transferred from the North, (Brunswick, Hanover,) was lost to Prussia, and became part of Saxony. Before that year, it had two universities, in Leipzig and Wittenberg. By that change, the latter university, well known through Luther and Melancthon, was abolished and joined with the university of Halle.

The university of Leipzig, founded 1409, by a general departure of the Northern German professors and students from Prague, in consequence of quarrels with the Czechs or Slavonic Bohemians,—has, at this moment eight hundred and fifty students and one hundred and eight teachers. Of the students, six hundred and eighteen are natives of the kingdom of Saxony. Of the one hundred and eight teachers, forty-four are "ordinary" professors, thirty-eight "extraordinary" professors, and twenty-six "*privat-docenten*," or licensed university teachers, without pay or title.

The "ordinary" professors, who have an endowed professorship, form the corporation of the university, and are the only members of their respective faculty, and of the senate, headed by a rector annually elected, who, in his judicial quality, (for the university enjoys, in all disciplinary cases, exemption from the police and common courts,) is assisted by a university judge, with one or more clerks. All the other affairs are decided by the senate, with the rector, or, if they concern a single faculty,

by the latter, with a dean at its head. The university possesses several large estates about Leipzig.

The appointment of an ordinary professor is effected by the nomination of three candidates by the proper faculty, and by the selection of one of them by the ministry of worship and public education. The extraordinary professors have only the title without an established professorship, and are promoted to that dignity, generally from among the "*privat-docenten*;" and are paid by the ministry. If the latter wishes to honor a professor or teacher still more, without being able to give him one of the existing professorships, it may make him an ordinary *honorary professor*; and of such, there are, at present, four in Leipzig.

The pay varies very much according to the endowment, and to the emoluments emanating from secondary offices or sinecures, joined with an ordinary professorship generally by seniority, (e. g., canonries of nominal, formerly actual, chapters,) to say nothing of the lecture fees, which are of some importance only in the juridical and medical faculties. Thus it happened at one time, that a young ordinary professor had but six hundred thalers, whilst another extraordinary professor of the same faculty had double the income. The latter was professor of archaeology, for which no professorship exists, and before he was called to Leipzig, professor of the gymnasium in Meissen, with a good salary. Of course he would not be got for that place without a similar or increased pay. The former had made the usual career from the "*privat-docent*" up to his badly endowed professorship. Most P. P. O., i. e., *professores publici ordinarii* have an income of from one thousand to three thousand thalers and upward in single cases. As to the P. E., (*professores extraordinarii*), their pay depends on the good will of the ministry at the time of their appointment, and at any time concerning its increase. A diminution of a once fixed salary is impossible in Germany.

The *privat-docenten* have no fixed pay. Their income depends on their lecture fees, and, in many cases, on what the ministry grants them by way of gratuity, scarcely refused another year, if once granted, but always as a free gift, and probably always on application. Besides, each faculty has to bestow one or more temporary scholarships, which may sufficiently help one or another during his probation time.

Still, the poor and unlucky may get a living by writing, (or even reading proof sheets,) all of them being talented, learned men, and devoted to their particular study.

I have left out the fencing and riding masters, &c., but there is no difference, all of them announcing their two or three different courses of lectures,—generally on "four days" or "two days," commonly Wednesday and Saturday, at the beginning of the semester; and giving them to any number of students from three to three hundred. A very few courses are entire failures; because no students are found, or not so many as the professor would consider sufficient for going on. Every teacher of the university is obliged to announce and give, except in the just mentioned case, one "public" i. e., gratuitous course of lec-

tures, but for the other or others, on a different subject of his branch, he may require any pay he likes,—generally very low, four to ten thalers a semester.

G. Hermann, now deceased, gave, year after year, two courses of lectures in the semester, the public and gratuitous one, in which he lectured on an author, on four days, i.e., Monday, Tuesday, Thursday and Friday; and a "private" one, but not less public, for a small pay, on a particular branch of philology, e.g., Greek syntaxes, metrics, mythology, etc., on "two days," all from eleven to twelve o'clock, in the same lecture room. Besides this one hour a day, he directed, on three evenings, for one to two hours, in the same room, the exercises of his Greek Society, once a week, and of the Royal Philological Seminary twice, (but on one day, by Prof. R. Klotz, as his deputy.)

Only such practical exercises in society, seminaries, hospitals, laboratories, etc., bring the student into nearer connection with the professor; all other teaching is solely performed by lectures; so that the professor must certify the attendance more from the paper, on which the student at the first lecture, signs his name, than from actual knowledge. The admission to such literary societies is, to one, easy, and to another more difficult. In Hermann's Greek Society, (for debating in Latin on a critical treatise written by a member in succession, and a few days before delivered to Hermann,) there were, in my time, not more than eight members, and in one year but one was admitted. The access to the Royal Philological Seminary, (for Latin explanation of some Greek or Latin authors, by each of the members in succession, and then debating on it by the rest; Hermann deciding all doubtful questions, or, in Latin, Klotz,) was, perhaps, somewhat easier. The admissions depended on the acceptance of a philological treatise; for the Greek Society, by Hermann, for the Seminary, by Hermann and Klotz, the latter being then adjunct.

The life of a German student in the university is well known to be that of a free man. Hence it varies in moral and all other respects as much and more, than that of any free community. He may attend any lectures he pleases, and, if he is bound to certify the attendance of some obligatory lectures, he may attend once for signing his name and paying, should it be a private lecture. So far all is arbitrary. But one thing remains that influences a student's life more or less from the first moment, viz., the examination which awaits him at the end of his professional "studies," if he wishes to make a public use of them. Still, if by singing, drinking, fencing, or fighting, he has lost his time, but not his energy of mind, he may make up a good deal in the last year, and learn by heart, (in "repetitoriums" kept by practical teachers,) what he ought to have studied. On the other hand it is well known, that Germany has "hard" students then and during life. Such continue their general education by attending, in the first year, philosophical or philological and historical lectures besides their professional studies, and they are not satisfied with hearing and learning what they heard, but they dare to think

by themselves and strive to join, as soon as a foundation is laid, a literary or scientific society, to give vent to their rising ideas.

Those who intend to pursue an academical career, continue their private studies, after they have passed the examination, in Leipzig or elsewhere, until they consider themselves prepared for shewing the result of their researches. Then they apply to the dean of the respective faculty, presenting, besides other certificates, a treatise on any subject of their profession they choose, but mentioning at the same time the particular branches on which they intend to lecture. This being approved by the faculty, especially by such professors as are concerned, selected for that purpose, he is admitted, or may be considered so, though he has still to defend publicly his thesis, now printed, against the attacks of the assembled professors of the faculty, in presence of many students and other interested persons; and, at another time, he has to give a trial lecture. Many a one has found it hard work to get in, and then has waited a long time for a professorship. Hence the saying: *Lipsia vult expectari*.—(Leipsic chooses to be waited for.) But it must be mentioned, that with regard to professors there is no boundary line within Germany, and that many a slighted "*privat-docent*," with a poor chance in his native country, was suddenly called from one end of Germany to an ordinary professorship at the other end. Thus the noble set of scholars, who adorn the university of Berlin are, most of them, not natives of Prussia, but called there from other universities by the choice and well applied munificence of the king.

Others, preparing for practical life, go a different way after their examination. Theologians, now called candidates of divinity, have to wait two years, generally spent in teaching, before they can apply to the "State" examination in Dresden, in order to become candidates for the ministry. That being passed, he is fit for accepting a parish, if a "patron" should choose him, or for waiting ten years, if he expects a place from the government. All this time is commonly employed with teaching in schools or families.

Candidates of the law and notaries, for such they are made by the examination in Leipzig, have to pass likewise, after about two years, spent generally in the office of a lawyer, another examination, if they wish to be "advocates," by presenting their "*specimina*," i e., a practical exercise on a lawsuit with a proper verdict. After the approbation of this composition, they have a right to be made advocates as soon as their turn comes. In the mean time, year after year, they may work as lawyers, but with the signature of an "advocate." Such as wish to follow an official career, begin as "accessists," i e., as unpaid assistants in a public office, until they get a preferment of any kind.

Students of the medical, and of the philosophical faculties, (teaching,) are, after their university examination, prepared and ready for practice. But the former have, about the same time, to present a medical thesis, and to defend it publicly, for obtaining the degree of "doctor." Such of the philosophical and other faculties as wish the same degree, have, of course, to

pass, at any time they please, a different examination, or a public disputation for this one purpose. Only the title of "doctor of theology" is almost exclusively honorary, and bestowed on the high dignitaries of the church, or first-rate scholars in divinity. Also, in other faculties, honorary degrees are usual. I must repeat here, what I stated at some other place, that we have a large number of physicians without the title of doctor, (given only by courtesy,) viz., all surgeons in and out of the army, and the "*medicinæ practicos*," as they are called, who have passed their examination in the surgical college at Dresden. On the other hand, a good scholar in medicine may be M. D., if he has received the title for a treatise from another university, but without the right of practicing in Saxony, unless he has acquired the right and the title by examination and disputation in Leipzig.

Here the mining academy, etc., and the polytechnical school, all spoken of before, might be mentioned as of a similar rank with the university. That the higher department of the polytechnic school aspires to the grade of a technical university is easily understood and externally impressed by having a *maturitatis-examination*, at the end of the lower section, for such as wish to enter the higher. But I could not well separate it from the industrial school, and the latter scarcely from the *Volksschulen* of a higher grade. The same applies to the various academies already treated of.



Lenisow Olmittob

LENISOW OLMITTOB

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the fact that the Government has been unable to secure the necessary funds to carry out its policy of non-interference in the internal affairs of the country. The Government has been unable to secure the necessary funds to carry out its policy of non-interference in the internal affairs of the country.

and order of the College in 1804, under the pressure of the then incipient maturity of his powers and the of his own self-reliance. He at once took to his studies with a diligence—a care—distinguishing him for his industry and industry. He was entered with the highest honors of the law in 1812, when he received the degree of Doctor of Laws. He then spent some time in the employment of teaching; and for two years



Amos Austin

III. DENISON OLMSTED.

DENISON OLMSTED, one of the earliest advocates of special institutions for the professional training of teachers in the United States, and for nearly fifty years a successful teacher, and promoter of education and science, was born in East Hartford, Connecticut, on the 18th of June, 1791. Having lost his father in very early life, his education devolved, from the first, on his surviving parent, who will long be remembered by those who knew her, for her native strength of mind, her soundness of judgment, and her uncommon piety and benevolence. He was early trained to those habits of order, diligence, and perseverance, for which he has been so much distinguished throughout life. About the age of thirteen, he was placed in a country store with a view to the mercantile profession; but he soon showed so strong a taste for science and literature, as to convince his associates that he was destined to higher employments. Even at this early period he became an earnest student of English literature, and made very considerable advances in the elementary mathematics. Nothing could satisfy such a mind but the highest advantages for education; and, with the reluctant consent of his guardian, he resolved, at the age of sixteen, to prepare himself for admission to Yale College. He accordingly commenced his studies in the year 1807; and, with a view to husbanding his limited means, he undertook the care of a public district school. He thus gained those practical views of teaching, and that acquaintance with the youthful mind in its early development, which have made him eminently qualified to prepare text-books in the simplest rudiments, as well as in the higher departments of science, and to take an active part in promoting the interests of general education in our country.

Mr. Olmsted entered Yale College in 1809, under the presidency of Dr. Dwight, then in the maturity of his powers and the height of his distinguished reputation. He at once took rank among the best scholars of his class—a class distinguished for the eminent men it produced—and graduated with the highest honors of the institution in the autumn of 1813, when he delivered an oration on the “Causes of Intellectual Greatness.” He immediately resumed his favorite employment of teaching; and for two years had the charge

of a select school in New London, Connecticut, where he was eminently successful both in discipline and instruction.

In 1815, he was chosen to the tutorship in Yale College—a laborious and responsible office, which he filled, with great acceptance to his pupils and the faculty, for two years, when he accepted the appointment of Professor of Chemistry in the University of North Carolina, remaining at Yale the following year, as a private pupil of Professor Silliman. There, associated with President Caldwell, Professor Elisha Mitchell, Prof. Ethan A. Andrews, and Professor William Hooper, he had the satisfaction of seeing the university take an elevated rank among the higher seminaries of the country. During his connection with the University of North Carolina, he commenced, under the auspices of the legislature, a geological survey of that state, which was the first attempt of the kind in this country.

In 1825, Professor Olmsted was called to the chair of mathematics and natural philosophy in Yale College, which had been filled with eminent success by his classmate, Professor Fisher, who perished in the Albion, on his outward voyage to Europe for scientific improvement, in 1822; and afterward by Professor Dutton. The duties of the two professorships were discharged by him until 1835, when he resigned the chair of mathematics to Professor Anthony D. Stanley, whose genius and attainments in these studies he had helped to foster and mature.

Professor Olmsted is the author of several text-books, originally prepared to meet the wants of his own college classes, but which have taken their place among the standard works of the country. His "*Natural Philosophy*" appeared in 1831, and was followed within a year by the "*School Philosophy*," adapted to academies and high schools; both have had, and still have, a wide circulation—the latter having passed through nearly one hundred editions. In 1839, he published "*Astronomy*" for college classes, which was followed by a compendium under the title of "*School Astronomy*." In 1842, appeared his "*Rudiments of Natural Philosophy and Astronomy*," adapted to pupils in elementary schools, both public and private. This little work has passed through fifty editions, and has been printed in raised letters for the use of institutions for the blind, having been selected by Dr. Howe for its clear, accurate, comprehensive presentation of the fundamental principles of the sciences of which it treats. His "*Letters on Astronomy*" was prepared as a reading-book for the School Library, commenced under the auspices of the Massachusetts Board of Education. It has been used extensively and as a text-book, especially in female seminaries. Professor Olmsted brings

to his preparation of text-books a full and familiar acquaintance with the subjects treated, and a practical knowledge of successful methods of teaching the same.

Professor Olmsted deserves honorable mention in the history of popular education in the United States, for his early and continued advocacy and labors in behalf of improvement in elementary schools. In an oration delivered at the commencement exercises of Yale College, in 1816, on taking his degree of Master of Arts, he took for his subject, "*The State of Education in Connecticut.*" In this address he pointed out "the ignorance and incompetency of schoolmasters" as the primary cause of the low condition of the common schools, and appealed to public and private liberality to establish and support institutions of a higher grade, where a better class of teachers might be trained for the lower schools. To meet a great evil by a special remedy, and at the same time advance the condition of popular education generally, he had already projected the plan of "*An Academy for Schoolmasters.*" We have before us a communication of his, in which he specifies the steps by which he was led to his conception of such a seminary.

"My course as a teacher began with a small district school, when I was seventeen years of age, and while fitting for college. I had there a full opportunity to become acquainted with the state of education as it then existed in our village schools. On leaving college, in 1813, I resumed the profession of teacher (which I have followed ever since,) by taking charge of Union School, at New London. This was a select school, supported by a few of the first families of the place, who desired to obtain for their sons a superior training for business or for college, according to their destination in life. It had been continued for several generations, and had enjoyed the instruction of a series of eminent teachers, among whom were the celebrated Nathan Hale, Hon. Jacob B. Gurley, Ebenezer Learned, Esq., Doctor Jonathan Knight, of the medical department in Yale College, and Prof. Ebenezer Kellogg, of Williams College. The proprietors, desiring to have their sons educated exclusively in that school, after leaving the rudimentary female schools, introduced them at the early age of eight or nine years, and kept them there until they went to business or to college. The number was limited to thirty, but the variety of age, and the different professions in life for which they were destined, occasioned an unusual range of studies. Some were in the spelling book; some in English grammar and geography; some in the languages, from Latin grammar to Virgil's Georgics and Xenophon's Anabasis; and some in different branches of mathematics, from simple arithmetic to algebra, surveying, and navigation. It required the most exact order and method to complete the round of recitations in half a day, and secure, for the whole school, half an hour for penmanship at the close of the forenoon, and half an hour for reading at the close of the afternoon.

I had here full opportunity of comparing the effect of different courses of study upon lads of similar age, and soon discovered a marked difference, in intelligence and capacity, between those who were studying the languages and mathematics preparatory to entering college, and devoted only a small portion of every day to the common rudiments, as English grammar, geography, reading, writing, and spelling, and those who spent all their time in those elementary studies. I was surprised to find that the former excelled the latter even in a knowledge of these very studies; they read better, spelt better, wrote better, and were better versed in grammar and geography. One inference I drew from this observation was, that an extended course of studies, proceeding far beyond the simple rudiments of

an English education, is not inconsistent with acquiring a good knowledge of those rudiments, but is highly favorable to it; since, on account of the superior capacity developed by the higher branches of study, the rudiments may be better learned in less time; and a second inference was, that nothing was wanted in order to raise all our common schools to a far higher level, so as to embrace the elements of English literature, of the natural sciences, and of the mathematics, but competent teachers and the necessary books.

I was hence led to the idea of a 'Seminary for Schoolmasters,' to be established at the expense of the state; where the instruction, at least, should be gratuitous. It was to be under the direction of a principal and an assistant; the principal to be a man of liberal education, of a high order of talent, and an experienced and successful teacher. The assistant was to be well versed in the English branches of education, at least. The course of study was to occupy from one to two years, and candidates were to be admitted only after an approved examination. The pupils were to study and recite whatever they were themselves afterward to teach, partly for the purpose of acquiring a more perfect knowledge of those subjects, and partly of learning from the methods adopted by the principal the best modes of teaching. It was supposed that only a small portion of time would be required to be spent upon the simple rudiments, but that the greater part might be devoted to English grammar and geography, arithmetic, algebra, geometry, and such works as Blair's Rhetoric; studies adapted to improve the taste, and make correct and accomplished writers. Ample instructions also were to be given by the principal on the organization and government of a school.

A class of sixty pupils, sent out from the seminary every year, would in ten years furnish to the village schools a body of able teachers, who would raise the standard of education in the common schools to a level with that of the 'academies,' which were scattered here and there over the state, being designed to afford to the few who could bear the expense, opportunities for learning those higher branches of an English education, which were not attempted at the common schools. Few of the whole number of children, however, enjoyed these superior advantages; but the greater part finished their education at the village schools, with nothing more than reading, spelling, writing, and a little arithmetic. Not even grammar and geography were at that time taught in the common schools.

There was one very encouraging feature in my plan. No sooner would this superior order of schoolmasters commence their labors, than the schools themselves would begin to furnish teachers of a higher order. The schoolmasters previously employed, were for the most part such as had received all their education at the common schools, and could only perpetuate the meager system of beggarly elements which they had learned; but it was obvious that schools, trained in a more extended course of studies, would produce teachers of a corresponding character. Therefore, if we could once start the machine, it would go on by its own momentum.

At the commencement at Yale College, in 1816, when I took my master's degree, I brought the outlines of this plan before the audience, in an oration on the 'State of Education in Connecticut.' I was then a tutor in the college, and zealously engaged in instructing a class; but I did not lose sight of this favorite idea of an 'Academy for Schoolmasters.' I also laid out a scheme for an extended course of newspaper essays, which would fully bring the subject before the public, and took every opportunity to present the plan to individuals of eminence, who were likely to feel interested in the improvement of our common schools, or who had influence in the public councils. Should the proposed essays have the desired effect of arousing public attention to the importance of the plan, I next intended to endeavor to have it brought before the legislature, with the view of securing means for carrying it into immediate execution.

At that moment I unexpectedly received the appointment of Professor of Chemistry in the University of North Carolina. The question was submitted to my friends, whether I should accept the invitation, or remain here and endeavor to carry out my plan for the establishment of a 'Seminary for Schoolmasters.' The slender prospect of interesting the community in the scheme, and the extreme backwardness of our legislature to appropriate funds for the promotion of education, in any other manner than that to which the school fund was exclusively devoted, led me to yield, though very reluctantly, to the advice of my friends, and

accept the appointment from abroad. I had less occasion to regret this decision, since the idea of normal schools was shortly afterward conceived by the Rev. Thomas H. Gallaudet, James G. Carter, Esq., Governor Dewitt Clinton, and others, and brought before the public by them under circumstances so much more favorable than I could have commanded, had I remained to prosecute my favorite enterprise."

As a member of the Board of Commissioners of Common Schools for Connecticut in 1840, Prof. Olmsted, in drafting the annual Report of the Board to the Legislature, thus returns to the subject which first arrested his attention twenty-five years before.

Wherever normal schools have been established and ably sustained, the experiment has uniformly resulted in supplying teachers of a superior order. As in every other art whose principles are reduced to rule, and matured into a system, the learner is not limited to the slow and scanty results of his single, unaided experience, but is at once enriched with the accumulated treasures of all who have labored in the same mine before him. Without such an opportunity, he may be compared to the medical practitioner, who commences his labors without the knowledge of any settled principles of his art, but expects to acquire his knowledge of his profession in the course of his practice. If it is plain that the physician needs, at the commencement of his career, that knowledge of the healing art which contains the embodied experience of those who have gone before him, and carried his profession to the highest degree of excellence, no less does the instructor of a school need the wisdom of his predecessors to guide him, at his first setting out; nor can he any better afford to wait for the slow returns of his own experience. Indeed, there is, in the case of the young teacher, a peculiar need of this wisdom in advance, since the employment is not usually a business for life, but only of a few years at furthest,—a period in itself too short to gain much of the wisdom of experience, and terminated almost as soon as such wisdom begins to be acquired.

The employment of FEMALE TEACHERS to a much greater extent than has hitherto been done, deserves much consideration from the friends of this cause. Heaven has plainly appointed females as the natural instructors of young children, and endowed them with those qualities of mind and disposition which pre-eminently fit them for such a task. Endued with a greater measure of the gentleness so winning and grateful to the feelings of a child, and of the patient forbearance so essential to those who are inculcating the first rudiments of knowledge, their action on the mind and disposition of the child is peculiarly auspicious. Nor, indeed, is the sphere of woman confined to training the minds of pupils in the mere elementary branches; when her own mind is disciplined, and exalted by cultivation, and enriched with knowledge, she exhibits powers of communicating instruction, and indeed all the attributes requisite for teaching and governing a school, no wise inferior to those of the other sex. Experiments, as far as they have gone, encourage the belief that well-educated females may bear a far more extensive and important part in the instruction and government of our common schools than they have hitherto done; that here is to be found the means, so desirable, of a division of labor in schools, when the numbers are too great for one preceptor. A signal relief to the preceptor himself, and no less advantage to the pupils, will result from a separation of the school into two departments, the younger pupils being committed to a female assistant, while older pupils enjoy almost the sole attention of the principal. But if females are to bear so important and extensive a part in the instruction of common schools, provision must also be made for their training in normal schools; and, in the disposition of any funds appropriated to the education of teachers, females, destined for this profession, ought to come in for their due proportion.

In the opinion of the Board, we can not make an adequate provision for the supply of the requisite number of teachers, who shall be at once capable of teaching, in the best manner, all that the pupils of our common schools are capable of learning, and of conducting the order and government of their institutions, according to the most approved methods, without the establishment of NORMAL SCHOOLS, devoted exclusively to the education of teachers, in the principles and practice of

their profession, and guided by men eminent for their talents and practical wisdom. But if it is thought that we are not prepared to erect and sustain Seminaries of this independent and elevated description, the Board would suggest the expediency of commencing the work of educating teachers on a limited scale, by connecting a department for this purpose, with some of the existing academies in different sections of the State. A small amount of funds, judiciously expended in the modes indicated by the Secretary in his Report, would, in the opinion of the Board, accomplish a great, immediate good in improving the qualifications of our common school teachers.

Professor Olmsted has been one of the few teachers in our higher seminaries of learning, who have assisted, from the start, by their presence and co-operation the efforts of the friends of common schools and popular education. His sympathies have been with those who have labored for the improvement of the schools of his native state prior to 1826, down to the present time. In 1838, he delivered a lecture before the American Institute of Instruction on the *School System of Connecticut*, in which, after an interval of nearly a quarter of a century, he points again to the absence of an institution for the education of teachers as the great defect in the school system of the state. In 1845, before the same association, he drew the *Ideal of a Perfect Teacher*. Thorough, accurate, and comprehensive knowledge,—high religious character, deep enthusiastic love of his work and faith in its results, a strong and clear intellect, a lively imagination, good taste and good manners constitute the indispensable elements of a teacher of the people. He has responded cheerfully to the call of the Superintendent of Common Schools to address Teachers' Institutes and Teachers' Associations, and has repeatedly lectured in the Hall of the House of Representatives, during the session of the Legislature, when any action was to be had in either branch concerning common schools. He has availed himself at all times of the lyceum and the popular lecture, as well as of the daily press, to apply the principles of science to the explanation of extraordinary phenomena of meteorology and astronomy, as well as to the advancement of domestic comfort and popular improvement generally. In an Essay read before the American Association for the Advancement of Education, at New York in 1855, he showed, in a felicitous manner, that the whole drift and tendency of science in its inventions and institutions is democratic.

His more elaborate scientific papers have appeared in the "*American Journal of Science*," the "*Transactions of the American Association for the Advancement of Science*," and the "*Smithsonian Contributions*." He has also been a frequent contributor to the "*Christian Spectator*," and the "*New Englander*."

IV. SAMUEL READ HALL.

SAMUEL READ HALL, the author of "*Lectures on School Keeping*," and the first principal of the first Teachers' Seminary established in this country, was born in Croydon, N. H., October 27, 1795,—the youngest of eleven children of Rev. Samuel Read Hall and Elizabeth Hall, his wife.* He received in infancy the name of Read,—that of Samuel having been prefixed by authority of the legislature, after the death of an elder brother. Soon after his birth, his father made a purchase of one-half of the "Eastern Township" in Canada, and with his family commenced his journey to settle there, during the winter of 1796. Before reaching his destination, however, he learned that his title was not valid, and that those from whom he had purchased had absconded; by which he had lost his entire property. This information reached him at Maidstone, Essex Co., Vermont, and then he was obliged to stop, having no inducement either to proceed or to return. He procured accommodations for the family in Guildhall, an adjoining town, and obtained the lease of a tract of public land, upon which he continued to reside for fifteen years.

The hardships of pioneer life were experienced by his family in full measure. The number of families in the town was, at that time, only ten or twelve. A mill was soon erected at Marshall's Fall on the Connecticut, one mile from his residence; but no school was commenced in that part of the town for several years. The only literary advantages enjoyed by the younger children were those of the "home school." But these advantages were better, perhaps, than most children enjoy under similar circumstances; the parents being well educated, and the father especially, having been long employed in teaching, at the place of his former residence, during the winter of each year.

The subject of this notice had made so much progress, when a school was commenced in the neighborhood, that, though only eight or nine years of age, he was placed at once in the "first class," to read and spell. The reading-book was Morse's Geography, and the lessons

* The parents of Mr. Hall, bearing the same name before marriage, were remotely related. His paternal grandfather was Stephen Hall, of Sutton, Mass., and his maternal grandfather, Hezekiah Hall, of Uxbridge, and subsequently of Tyngham, Mass. These families are traced back to two brothers, who emigrated to this country about the year 1630, and settled, one near Cape Cod, and the other at what is now Medford, Mass.; descendants of whom are found scattered in all parts of the United States.

for spelling were taken from Perry's Dictionary. The following winter he was classed with those who were studying Pike's Arithmetic and Alexander's Grammar.

At that period, there were no schools during the summer, and usually but two months in the winter; so that the privileges that young Read enjoyed, at the age of fifteen years, did not amount to a year, and this under teachers extremely deficient in qualifications. The latter fact was, however, no doubt indirectly beneficial to him, with his thirst for knowledge, as it led him to feel the necessity and induced the *habit of self-reliance*.

His father's library, though very small, contained a few books that were of great service to Reed. In place of the multitude of narratives, fictitious and others, that beguile the childhood of our time, he had Watts on the Mind, Mason on Self-Knowledge, and Locke on the Human Understanding. With the two former he made himself quite familiar before he was twelve years old, and with the latter before he was fifteen. "*The works of that learned man, William Pemble of Magdalen Hall, Oxford,*" a very old book, occupied much of his leisure time in boyhood. This volume is partly in Latin and partly in English, and treats mostly of religious matters. He found in it a "*Briefe Introduction to Geographie,*" and an essay entitled "*A S V M M E of Moral Philosophie.*" With the aid of an old Latin Accidence and Lexicon, used by his father when a boy, and Bailey's Dictionary, he was enabled not only to read the English essays, but to get at so much of the meaning of the chapters, "*De Formarum Origine*" et "*De Sensibus Internis,*" as to become greatly interested in them. He continues to regard that old folio with high reverence to this day, and will leave it as an heir-loom to his children.

In consequence of exigences into which Mr. Hall had been thrown, as above stated, he became the religious teacher of the town; after a few years, was regularly inducted into the ministry, and, in 1811, was ordained pastor of a church in Rumford, Maine. To that place his youngest son accompanied him; the other children then living having arrived at manhood. Rumford was then but another sphere of pioneer life,—principally surrounded by wilderness, there being no settlements on the north. Indeed, settlements had extended but a few miles on either side of the Androscoggin, and from Ellis river, a tributary uniting with it in that town.

Rumford was in a transition state, and, though rapidly increasing in population, the schools were of the kind described in Mr. Burton's graphic "*District School as it was.*" The care of a large farm and other circumstances prevented Read's attendance even at these schools ✓

more than a few months, till after the decease of his father, which occurred in 1814.

Left now to the guidance of his own inclination and judgment, young Hall undertook in earnest to qualify himself to become a TEACHER. With no patrimony, he was entirely dependent on his own efforts. He was besides always a sufferer from diseases developed in childhood, and which interfered with his ability to perform an amount of manual labor, common to young men of his age. After some time spent in study, under the direction of Rev. Daniel Gould, who succeeded his father, as pastor of the church at Rumford, he entered upon his chosen employment, in 1815, in that town, and continued to teach there and at Bethel, during that winter. His purpose then was to prepare for college, and to become a minister of the Gospel. As a teacher, he felt himself greatly deficient in necessary qualifications, but his success was very much beyond what he had dared to expect. In fact the spirit of the pioneer and originator soon began to work outwardly, as it had been trained to do within. After he had become well acquainted with his school at Bethel, he endeavored to introduce some improvements. Among these was the writing of compositions. This awakened at first strong opposition among both pupils and parents. It had never been required in a district school before, within the knowledge of either the instructor, the scholars, or the parents. The latter took the part of their children, because they believed them incapable of the task, and the scholars, thus sustained in their disinclination to attempt it, asked with one consent to be excused. The instructor requested the attendance of both parents and pupils the next evening, to hear his reasons for endeavoring to introduce the exercise. At this meeting his object was to convince all of both the practicability and usefulness of such an exercise; and, having given them his reasons, he left the decision with themselves. The result was a demonstration of his remarkable *pedagogical* powers. When the day for compositions arrived, he had the satisfaction of receiving one from *every one* of those whom he had requested to unite in the exercise, and, among others, from a little girl, eleven years old.

On receiving and reading the compositions, he affectionately thanked his pupils for the effort they had made, and told them that, with few exceptions, the compositions were better than he had expected,—that they had proved the truth of the adage, “Where there is a WILL, there is a WAY.” From that time writing compositions was a weekly exercise. And this success marked at least as decided an era in the teacher’s progress as in that of his pupils. It assured him that much more could be accomplished for the benefit of schools, if the right

means were used ; and he became convinced and was led to feel that this ought to be attempted, both by himself and others.

During the spring and summer of 1818, Mr. Hall attended an academy at North Bridgeton, Maine, under the instruction of Rev. V. Little, and, in the autumn of that year, entered the Kimball Union Academy, at Plainfield, New Hampshire, where some assistance was offered to young men preparing for the ministry. With this seminary he was connected for nearly three years, teaching a part of each year at Lyndeborough and Wilton, New Hampshire. In these places he succeeded in effecting important changes, both in the studies prosecuted and the books used. His first aim was to awaken a thirst for necessary knowledge, and to convince all that ignorance of the branches which could be required in the common school, was not merely a misfortune, but a sin. An unusually large proportion of the members of the school at Lyndeborough were over sixteen years of age, and several were between twenty and thirty. Nothing but the elementary branches had ever been taught in these schools ; not even geography. This study, with the history of the United States and natural philosophy, he introduced during the first winter, and intense interest was awakened by them. It was asserted, by both parents and pupils, that more progress was made in the school during that winter than in all the five preceding. He was employed to teach in the same place the ensuing autumn and winter. Several other studies were then introduced, and the school attracted much notice, both there and in the neighboring towns. His success, in fact, was so marked that his services were sought in many places, at almost any wages that he was disposed to ask. The next winter he taught at Wilton ; and also during the autumn and winter succeeding. The results here were still more satisfactory, and a new era commenced in the schools of that town.

It must by no means be supposed that Mr. Hall's success was due solely or chiefly to his intellectual activity and enterprise, and the stimulating effect of these, and of new studies upon young minds. His influence through the conscience and the affections was still more decided and important. It was felt, throughout the school, that Mr. Hall would do what was right, and that it was the desire of his heart above all things that every member of the school should also do what was right in the sight of God. The sense of duty—the feeling of accountability for talents and opportunities, and a proper regard for the just claims of others, were carefully cherished ; it was the public sentiment of the school that the teacher was the helper and friend of all, and that an exact compliance with his wishes was wisest and best.

The best lessons of the "*Lectures on School Keeping*," were working themselves out in actual realities. But these labors were too much. Mr. Hall's health became seriously impaired; and, after a period of great prostration, he was obliged, reluctantly, to abandon his intention of entering college, and pursue a less complete course of study. He left Meriden, and studied theology, first with Rev. W. Chapin, at Woodstock, Vermont, and then with Rev. W. Eaton, of Fitchburg, Mass., at which place he taught a school, in 1822.

While at Fitchburg, he was advised by several clergymen not to defer longer his entrance upon the work of the ministry; and, although not himself convinced, he consented to refer the question to the Worcester North Association. By that body he was licensed, and immediately received a commission from the Domestic Missionary Society of Vermont, to labor at Concord, in that state.

At Concord, it was one of the first duties with him to visit the schools. He soon saw that the time of many of the children and youth was nearly lost, through the deficiencies of the teachers employed, and felt that in no way could he accomplish more good, than by efforts to "teach the teachers" of these and the neighboring schools.

When, therefore, he received from the church and people an earnest request to remain with them as pastor, his consent was given, on the condition that he should be allowed to open a school for the instruction especially of those in town who desired to become teachers. With that understanding, he was ordained, March 5th, 1823, and, the following week, opened the proposed seminary. He admitted a class of *young* pupils, as well as classes of those more advanced; the former rather as a *Model School*, in the instruction of which he intended to illustrate to those intending to become teachers, both how children should be governed and instructed.*

In order to awaken greater interest in the education of teachers, Mr. Hall prepared a course of lectures on school keeping, probably some years earlier than any other effort of the kind was ever made, either in the United States or Great Britain. These lectures were

* In order to a correct estimate of Mr. Hall's place in the history of educational improvement in this country, the dates are important. Here, in an obscure corner of New England, under the hand of one who was, to a remarkable degree, self-taught, self-prompted, and alone in planning it, was an institution with all the essential characteristics of a Normal School, eighteen years before the Massachusetts movement had reached that point of development which secured the establishment of the Normal School at Lexington. [See Vol. IV., pp. 215-229, of this Journal.] Mr. Hall was, in fact, a "teacher of teachers," at the head of such institutions almost continuously for more than seventeen years from this date; namely, at Concord, from March, 1823 to July, 1830; at Andover, from September, 1830 to June, 1837; and at Plymouth, N. H., from June, 1837, to May, 1840. The *chronological* plan, and independent origin of the "*Lectures on School Keeping*," are also important.

written without any aid from books or periodicals. When first delivered, there was not a single tract, within his knowledge, furnishing even "*hints*" on the subjects discussed.

"THE AMERICAN JOURNAL OF EDUCATION" was commenced in 1826, three years after the commencement of this school, and was at once heartily welcomed by Mr. Hall as a most important auxilliary. Every page was carefully read, as the numbers successively came to hand. The influence of that work, both while conducted by Mr. Russell and afterward by Mr. Woodbridge, was most highly salutary to the interests of education in the country. Many teachers besides himself regarded the work as the beginning of a new era in the progress of popular education. Some of the oldest writers in the country were secured as contributors, and very able discussions enriched its pages.

With the hope of awakening the attention of parents and children in the state to a subject almost entirely neglected in the schools, Mr. Hall prepared and published, in 1827, the "*Geography and History of Vermont*."* The success of this little volume exceeded the author's expectations. It was very soon introduced into most of the schools in the state, and was regarded with favor by teachers generally.

Some who had heard the "*Lectures on School Keeping*," expressed an earnest desire that they might be published. Mr. Hall accordingly conferred with friends in Boston, and teachers in other places, and the result was, its appearance from the press in 1829, and the sale of the first edition in a few weeks. A second edition was issued; and, soon after, an edition of ten thousand copies was printed on the order of the superintendent of common schools in New York, for distribution to all the school districts in that state.

About the time of the publication of these lectures, the trustees of Phillips Academy, Andover, erected a spacious building, with the design of establishing an English Department. In this effort, they had primary reference to the necessities of those who were to become teachers in "Common and Higher Schools."

The appearance of the Lectures, while the building was in progress,

* Of this work, the editor of the Journal, unsolicited, gave the following notice:—

"This is one of the most judicious and practical books for a primary school that we have yet seen. We value it, not so much for its entire correspondence with the views so often expressed in our pages, as for the uncommon quantity of useful and interesting matter it contains, and for its happy adaptation to the minds of children. The geographical details are well selected; and the chapter on natural history will furnish much food for thought, and will aid the early formation of good mental habits. The civil history is sufficiently copious for the purposes of such a volume; and the account of the hardships of the early settlers is highly instructive and entertaining.

Books, such as this, contain the true elements of enlightened patriotism, and possess a much *higher* value than is apparent at first sight."

and while the trustees were inquiring for a principal to take charge of the new seminary, led to a request that Mr. Hall would consent to be a candidate. Though he had, for more than a year, found his health seriously impaired by the care of a large parish and the labors of the school at Concord, and supposed he must soon relinquish one or the other, he shrunk from the responsibilities of the seminary at Andover. He felt the disadvantages of his early education; and, saying frankly that, in his opinion, some other person ought to be selected, declined the invitation. It was still, however, urged upon him, and in the result, after a long correspondence, his name was placed with those of other candidates, and he received the appointment, and was soon after released from his engagements at Concord.

The seminary was divided into three departments. The Normal or Teachers' Department; the General Department, designed to prepare young men for business; and the Boy's Department, or Model School. The "*Annals of Education*," for 1834, contains the following notice of the first of these departments:—

In the **TEACHER'S DEPARTMENT** are *three classes*. The course of study can be accomplished in three years. But, as the middle and senior classes are expected to be absent to enable them to teach during the winter, the course requires three and a half years. The regular time for admission is at the commencement of the summer term. Candidates for admission to the junior class, must be prepared to pass a satisfactory examination on the sounds of English letters, rules of spelling, reading, geography, first principles of etymology and syntax, intellectual arithmetic, history of the United States, ground rules of written arithmetic, and fractions. The year is divided into *three* terms, and the following studies are pursued at each:—

JUNIOR CLASS.

First Term.—English Grammar; Intellectual Arithmetic, *reviewed*; History of United States, *reviewed*.

Second Term.—Written Arithmetic; Geography, ancient and modern; History of England.

Third Term.—Written Arithmetic, *finished*; Linear Drawing, Construction of Maps; Use of Globes; Book-keeping.

MIDDLE CLASS.

First Term.—Algebra; Euclid; Rhetoric.

Second Term.—Algebra, *finished*; Trigonometry; Chemistry.

Third Term.—Chemistry, *finished*; Surveying; Spherical Geometry; Conic Sections.

SENIOR CLASS.

First Term.—Natural Philosophy; Logic; Civil Engineering.

Second Term.—Natural Theology; Evidences of Christianity; Moral Philosophy; Astronomy.

Third Term.—Political Economy; Intellectual Philosophy; Art of Teaching.

All the members of the junior class attend to the "*Political Class Book*" on Saturdays, and declamation and composition on Wednesdays, through the year. The middle and senior classes write compositions on subjects connected with the art of teaching.

Lectures are given, accompanied with illustrations and experiments, on the most important studies; particularly, natural philosophy, chemistry, and school keeping. Each one who finishes the course will have attended more than fifty lectures on the latter subject.

When the Teachers' Seminary, at Andover, was established, no

similar institution existed in the United States. The Prussian Normal Schools could not be closely imitated in this country, on account of great diversity of condition. Mr. Hall was obliged to *originate* every thing, according to his own judgment, and the limited experience he had.

The course of study to be established, and the length of time which it should occupy, demanded the exercise of great discrimination. If too much were attempted, but few would be willing to enter upon it; and, if too little, the qualifications of teachers would be superficial. A *three years'* course was established as, on the whole, preferable to one longer or shorter. And, so far as he had opportunity to know the opinion of the patrons of the seminary and the public, the length of time and the arrangement of studies were approved. A very obvious increase of interest in popular education was soon apparent. This was a source of encouragement, no less than of gratification. Applications for the services of the members of the seminary, to teach school, were greatly beyond the supply; while the compensation offered was more than doubled within a few years.

In this new and wider sphere, and with these encouragements, Mr. Hall's plans naturally received a larger development. It occurred to him that a new impulse might be given to the cause of *popular education*, by organizing a society, and employing agents to visit different parts of the country, who, by lectures and otherwise, might awaken the attention of parents to the defects of schools, and to the loss sustained by the rising generation. He invited the co-operation of the professors and students of the Theological Seminary, the teachers in the Latin School, and in the Female Seminary, at Andover, and several of the earnest friends of popular education in Boston and other places. The result was, the formation of the AMERICAN SCHOOL AGENTS' SOCIETY. ✓

This, it will be seen, throws considerable light upon the agency of the subject of this notice, in planting those seeds which have germinated, and are now producing such rich fruits in Massachusetts. At this time, none of those noble agencies were organized by the Commonwealth, which have since gladdened the friends of popular education. The spirit of improvement, though already extensively awakened, and full of hope and promise, had not yet embodied itself in the form of law.

In the formation of the American Institute, in 1829, Mr. Hall had co-operated, and was to have given one of the lectures at the first meeting, in August, 1830, but was providentially prevented from at-

tending. At the second meeting, August, 1833, he read a lecture on the "Necessity of Educating Teachers;" and, at another, one on "School Government."

His position involved a large amount of miscellaneous labor. As the head of a seminary, he received numerous applications for teachers. Many teachers also, not connected with the seminary, applied to him to obtain schools. These applications imposed upon him a very extensive correspondence, which, to one already overburdened with labor, was so onerous that his health soon became seriously impaired, for it obliged him to use, in work, time needed for sleep and exercise. It was no uncommon thing for him to be occupied in school, and at his desk, from sixteen to eighteen hours of the day. He was obliged to employ many assistant teachers from time to time, and superintending their labors was not a light task, while the government and direction of studies of the entire school devolved wholly on him. For a limited period, Mr. John Q. A. Codgell was with him, as associate principal. But this arrangement was not entered into with a view of permanency, and was continued only a few terms.

Several books, published during this period, added considerably to Mr. Hall's labors. He wrote and published the "*Child's Geography*," to illustrate what he regarded an error in the mode of teaching that branch; reversing the order that had been invariably pursued, and beginning with a description and map of a town, and ending with a map and description of the world. The sale was large, and continued long after other works of a similar kind were in the market. The "*Grammatical Assistant*," the "*School Arithmetic*," "*Lectures on Parental Responsibility and Religious Training*," "*A School History of the United States*," jointly prepared by him and Rev. A. R. Baker, "*Lectures to Female Teachers*," "*Teacher's Gift*," and "*What every boy can do*," were successively published, in addition to many anonymous articles in the "*Annals of Education*" and other periodicals. Several of these works were written, and all of them published, between the years 1830 and 1838. Of most of them, several editions were called for. By the misfortune in business of some of the publishers, while the works were in press, the success of two or three was less than it would otherwise have been, although the author never made any efforts to secure the success of his books after committing them to the press. Some were less carefully prepared than others. But those which cost him most labor were the most successful. This was true especially of the "*History of the United States*," the body of which was entirely his work, and which he regarded as the best he ever wrote. The publisher failed in busi-

ness while it was in press, and nothing was done to introduce it to the notice of teachers.

In the midst of these labors, at the commencement of the summer term, 1834, Mr. Hall was arrested by a very serious attack of pneumonia; and, although he partially recovered after a few weeks, he was obliged, in consequence, to withdraw from active efforts on behalf of several objects, and especially the School Agent' Society. He was not himself able to attend the annual meeting of that year, and was pained to know that most of those on whom most reliance was placed to carry out its plans, were also in feeble health, or had left New England. Not entirely recovering from the attack of pneumonia, the harsh coast climate affected him unfavorably. He was, therefore, inclined to accept the appointment, received at this time, of president of the new collegiate institution at Oberlin, Ohio; but yielded to the remonstrances of the Andover professors and others, against undertaking, in his state of health, so laborious an enterprise.

During the years 1834-36 also, Mr. Hall was subjected to very heavy domestic bereavements, in the death of more than half of his family; three children and his wife. Under these accumulated trials, his health declined so much that he felt constrained to tender his resignation to the trustees, and seek a residence in the interior, removed from the influence of its damp and chilly winds. When this became known, he received numerous invitations to occupy other fields, some from the south, and some from the west; but he thought a northern location promised more for his restoration to health. The trustees of Holmes Plymouth Academy, located near the geographical center of New Hampshire, had projected a theological department in the seminary under their care, and erected spacious buildings. Mr. Hall was chosen its principal, in January, 1837. But, before the plan was fully matured, a similar institution was established at Gilmanton, in the same state. When this fact was made known, Mr. Hall strongly advised the trustees to make the institution at Plymouth a Teachers' Seminary, for both males and females, and to modify their decision with regard to a theological department. On this ground alone was he willing, under all the circumstances, to accept the office. The trustees acquiesced. Their efforts had been commenced with confident expectation of receiving a donation of fifteen thousand dollars from a former citizen of Plymouth, who had emigrated to Alabama. This, with funds already possessed, encouraged the hope that a *Teachers' Seminary of high order*, could be founded and sustained. In this hope, Mr. Hall assumed the charge of the institution, in June, 1837. A plan of study for both a male

and female normal department, and for a classical and general course, was drawn up, and regular classes were formed at the opening of the school.*

At Mr. Hall's suggestion, Rev. T. D. P. Stone was elected associate principal, and filled that office from the autumn of 1837, but resigned the next year, to take charge of the Abbott Female Academy, at Andover, Mass. The number of pupils at Plymouth, the first year, was two hundred, and during the second, two hundred and forty-eight. The seminary was pre-eminently successful. But, after nearly three years, the expectation of the ample funds that had been relied on failed. Reverses in business on the part of others, also, made it evident that the trustees must fail of ability to sustain the school, with an efficient board of teachers; and the principal resigned his office. His health had been materially benefitted by change of residence, and but for the pecuniary embarrassments of the Board, he would have continued to consecrate his powers to the education of teachers, and the advancement of popular education. He had, however, devoted seventeen years to the work of "teaching teachers;" had originated many improvements in the mode of conducting schools,—had seen a new era commence in the educational advancement of the country, and was permitted to rejoice in the success of many teachers who had been trained under his guidance. He felt that his personal efforts were no longer essential in that field of labor. Seminaries were established, and other arrangements made in many places, for educating teachers, and would, he believed, soon become accessible to a large

*The design of the seminary and course of study, stated in the catalogue for 1838, were as follows:—"This seminary has been founded with the hope of improving popular education, by elevating the character of teachers. The trustees have three prominent objects in view: 1. To **EDUCATE TEACHERS** for common and other schools; 2. To fit students for college; 3. To furnish the means for a thorough English education. The original design of making **THEOLOGY** prominent has, on account of circumstances, been modified. The school embraces a department for males, and one for females. The academic year is at present divided into four terms, of eleven weeks each. The course of study in the Teachers' Department requires four years in the Male Department, and three in the Female Department; with the exception of one term each year, during which the members may be absent to teach school. Studies are pursued according to the following schedules:—

TEACHERS' COURSE OF STUDY IN THE MALE DEPARTMENT.

PREPARATORY YEAR.

Fall Term.—English Grammar and Intellectual Arithmetic.

Winter Term.—History United States; Watts on the Mind; Geography, commenced.

Spring Term.—English Grammar and Arithmetic, completed; Geography, (U. S.)

Summer Term.—History of England; Watts on the Mind, reviewed; Geography, completed; Exercises weekly in Singing.

JUNIOR YEAR.

Fall Term.—Arithmetic and Grammar, reviewed; Construction of Maps; Physiology, (with lectures.)

Spring Term.—Natural Philosophy, (with lectures;) Rhetoric; Botany, (with lectures.)

Summer Term.—Book-keeping, (by double entry;) Logic.

number of those who designed to enter that responsible vocation. Much as he had always "loved teaching," he loved the work of the ministry more, and consented again to be a candidate for the pastoral office. Of several invitations immediately received, he chose, for various reasons, to accept a call from the church and congregation at Craftsbury, Vermont. This town, in Orleans County, beautifully situated in the Y of the Green Mountains, is remarkably healthy, and contained a very intelligent society. The "Craftsbury Academy" in the town had long been a flourishing school. With a call from the church, he received, also, an appointment as principal of the academy, but with the expectation, on the part of the trustees, that he would employ assistant instructors to do most of the routine school work. By this arrangement, he hoped still to advance the interests of education, while, at the same time, his principal energies would be consecrated to the work of the ministry.

Mr. Hall accordingly removed to Craftsbury, in May, 1840, and,—true, still, to his early convictions and impulses,—at once organized a Teachers' Department in the Academy, in addition to a Classical and General Department. It was thought advisable that the course of study in the Teachers' Department should, at first, occupy but three years, the county being comparatively new, and the means for obtaining an education more limited than in older portions of the country. The school was more numerously attended than he had expected, from its retired location. A respectable number entered the department for teachers.

During the following years, a great increase of religious interest in Mr. Hall's parish made it impracticable for him to devote so much of his time to the school, and, in 1846, he resigned the care of it wholly;—except giving lectures to the students on the Art of Teaching, and on other subjects.

From that date to the present time, Mr. Hall has had little *direct* connection with the educational interests of the state, except to discharge the duties of county superintendent of common schools, and to co-operate with a county association of teachers, and a county natural and civil historical society. Of the latter he is now president. While the office of state superintendent of schools was continued, he was associated with that officer in conducting teachers' institutes, in several counties.

He retained his connection with the church at Craftsbury until 1854, when, in consequence of impaired health, he solicited a release; and during the following year was installed at Brownington, in the same county, a parish of less extent, where he is now discharging the duties of a New England pastor.

It may readily be inferred, from the preceding sketch, that Mr. Hall's studies, self-prompted and self-guided as he was in early life, and in working his way to his best conclusions, have been industriously pushed in more than one direction. His love of geology and natural history and his familiarity with those subjects, especially as the actual facts had come under his observation, led to his employment in the geological survey of Vermont for several seasons, and he is understood to be under a similar engagement for another year, as an assistant of Dr. Hitchcock. During the last four or five years, he has devoted his spare time to inquiries and collections for a work on the early history of Northern Vermont and the natural history of Orleans County, which is nearly ready for publication under the auspices of the "Natural and Civil Historical Society," of which he is president.

As a tribute to Mr. Hall's attainments and services, the trustees of Dartmouth College, some years ago, conferred on him the honorary degree of Master of Arts.

TEACHERS' SEMINARY

AT

ANDOVER, MASSACHUSETTS.

"The Teachers' Seminary at Andover was established in September, 1830, as a department of Phillips' Academy, one of the oldest literary institutions in New England. Its object, as set forth in a circular issued by the Trustees, was 'to afford the means of a thorough scientific and practical education, preparatory to the profession of teaching, and to the various departments of business.'

Though nominally a department of Phillips' Academy, it was from the first a separate institution, having its organization entirely distinct from that of the classical department.

The Trustees erected for the seminary a commodious and substantial school-edifice, and expended between two and three thousand dollars in the purchase of apparatus for illustrating the different branches of science. Liberal appropriations were made from time to time for the purpose of diminishing the expenses of the students. The institution was provided with a convenient boarding-house, and rooms for the accommodation of nearly a hundred pupils.

The seminary embraced a teachers' department, a general department, and a preparatory department or model school. The course of instruction in the teachers' department occupied a period of three years, and embraced most of the English branches pursued in our colleges, together with lectures and discussions on the theory and practice of teaching, and other kindred exercises. The course of instruction in the general department was shorter and more irregular. The members of this department were allowed to join any of the classes in the teachers' department, which they were prepared to enter.

In addition to the ordinary exercises of the general department, the study of civil engineering was introduced during the early history of the institution, and successfully prosecuted for several years, under the direction of the Rev. F. A. Barton. At a later period, special attention was given to the study of scientific and practical agriculture, under the instruction of the Rev. Alonzo Gray.

The preparatory department was an English school for boys, usually taught by a separate instructor, under the general superintendence of the Principal. Members of the teachers' classes were sometimes employed to conduct recitations in the preparatory department, but this department could not, at any time, be regarded as a school for practice.

The first Principal of the seminary was the Rev. S. R. Hall, who continued in office nearly seven years. In July, 1837, he was succeeded by the Rev. Lyman Coleman, who remained at the head of the institution till Nov. 1842, when the original object of the Trustees was abandoned, or the Teachers' Seminary was merged in Phillips' Academy.

The number of students in the teachers' classes was somewhat larger during the first six years than during the last six. The average number for the whole period was about fifty. The whole number of students that completed the prescribed course of study, during the existence of the seminary, was a little less than one hundred.

The immediate cause for uniting the Teachers' Seminary with the classical department of Phillips' Academy, in 1842, was the want of funds to sustain it as a separate institution. The limited number of students in the teachers' classes resulted in part from the same cause. In the classical department, the tuition of indigent students was remitted; but no such provision was made for the members of the teachers' classes.

The name of Samuel Farrar, Esq., of Andover, is identified with the history of this institution. If his generous and untiring efforts in its behalf had been seconded by those who had the means of giving it a liberal endowment, its usefulness would not have been brought to so abrupt a termination."

VISIT TO THE TEACHERS' SEMINARY, ANDOVER, MASS.

The following account of a visit to the Teachers' Seminary, at Andover, Mass., appeared in the "*Annals of Education*" for August, 1832 :—

The building for the Teachers' Seminary, in Andover, is pleasantly situated and handsomely constructed. It has two stories, besides the basement. I could not help contrasting this large, elegant, airy mansion, with the multitude of school-houses, which are every where to be found, whose narrow dimensions and miserable construction, better fit them for prisons than for places of instruction.

The first or lower story embraces the principal school room, a spacious entrance, and a room for a library. The entrance contains suitable places for depositing hats, clothes, &c., and a stairway. The second or upper story includes, besides the stairway and entrance, a room for the preparatory school, with a recitation room adjoining; a room for geological, mineralogical, and botanical specimens, and a room for lectures in philosophy, astronomy, &c., with the necessary apparatus.

Part of the basement story is occupied as a chemical lecture room and laboratory. The rest is designed as a workshop, and is, to some extent, already used for that purpose.

All these rooms are furnished with appropriate seats, and with desks, where these are necessary. The desks and seats of the principal school room are on an improved plan. The seats consist of a chair firmly fixed to the floor, with a very low back. The apparatus and specimens necessary in the illustration of natural science, are arranged in the several rooms appropriated to their use. The electrical apparatus, in particular, is very fine. The minerals, and geological specimens are already numerous, and are rapidly accumulating, through the exertions of the teachers and their pupils. The chemical laboratory is well supplied. The library contains 200 to 300 volumes, very judiciously selected.

Every facility might be afforded for the comfort, and convenience, and progress of a much larger number than have ever yet attended. It does not seem to be generally known that there is a school of this kind existing in New England, sustaining the high character which might justly be challenged by this institution.

The higher department is under the immediate care of Rev. S. R. Hall. He is assisted in this department by Mr. F. A. Barton, and in the preparatory department by Mr. L. Tenney, both of whom appear to be well qualified for their task.

School books of a good character are selected, and the most approved methods of instruction adopted. But, while books, and apparatus, and hard study, are deemed indispensable to thorough and efficient progress, much is accomplished by familiar, conversational lectures, giving the student ample opportunity for asking questions, suggesting doubts, &c. No attempts are made to hurry through a science, for the sake of having gone through it; but constant, and as it appears to me, *successful* efforts are made to teach every thing to which the pupil's attention is called *thoroughly*.

In both departments of the school, there is nothing of that routine of mere memory work which is so often witnessed in our schools. Those methods are pursued, generally speaking, in every exercise, which give employment to the whole intellect, and not to certain favored faculties merely, while the rest are suffered to lie neglected. If any faculty has not been properly developed, in the early years of instruction, a course is here pursued which is most happily adapted to awaken and excite its slumbering energies, and bring it into habits of cheerful, healthy, vigorous action.

The spelling lessons are usually short. Few, if any, words are studied according to the arbitrary arrangement of most dictionaries and spelling books. Sometimes the teacher dictates a series of words, which the pupils write on their slates; at others, they are requested to select all the words of a certain class which they can recollect, and write them down, thus forming their own spelling lessons. By classes of words is meant all which belong to a certain occupation, art, tribe of animals, &c. Thus, at one time, their spelling lesson will consist of the names of all the birds of prey they can think of; at another, of all the implements used in husbandry, or in some mechanical occupation. The examination of these lessons by the instructor, is often accompanied by much useful and familiar conversation on various topics, not excluding moral and religious subjects. Many other methods of teaching spelling are adopted.

I was never before so thoroughly convinced of prevailing deficiencies in teaching *reading*, as while witnessing the performances of these pupils. I was so much ashamed of my own neglect of distinctness, and propriety of enunciation, that I resolved at the moment never to read or speak before others again, till I had subjected myself to a thorough drilling on these points.

Arithmetic was also taught in a very judicious manner, in both the higher and lower departments. Great attention was paid to the difficult subject of *carrying*. Three-quarters of an hour of close attention is given to penmanship once in two days.

In both departments of the institution, every branch is pursued, as far as possible, independently of every other. By this is meant that every study has its appropriate hour and space, and when that hour arrives, it is exclusively attended to. In the higher department, the exercises for every day of the week are written down plainly and minutely, and a monitor rings a bell at the arrival of the time for every new exercise. So exact is the order, and so accustomed to it have the students become, that, so far as

discipline is concerned, it matters little whether the teachers are present or absent, provided the monitor is at his post, and performs his duty.

The higher branches of the mathematics, geography, grammar, history, composition, drawing, philosophy in its various divisions, chemistry, political economy; indeed, every thing to which the attention of the pupils is called, is pursued, so far as I could ascertain, in the same rational and thorough manner, as spelling, reading, and arithmetic. Not only is every thing rendered intelligible, but *interesting*; and the thinking powers of the pupil are called into useful activity. During my visit a course of chemical lectures was commenced by an assistant, which promised to be highly practical and useful. Music is taught in the seminary, and a hymn is also sometimes sung in connection with the religious exercises.

But what rendered this seminary most deeply interesting to me, was the conviction, which I was unable to resist, that all its methods, and plans, and processes, were eminently adapted to the development and formation of character. As a place of *instruction*, it justly ranks high; and I do not believe it has been too highly appreciated. But, as a place of *EDUCATION*, it has still higher claims. Knowledge of the best kind is successfully inculcated by the best means; but the capacity and disposition to make a good use of knowledge, is regarded as of still *more* importance.

In the first place, the maxim that a sound mind requires a sound body is not forgotten. The location of the seminary is peculiarly happy. The building is kept thoroughly ventilated, and a due regard is paid to temperature. Exercise receives a measure of that attention which its superlative importance demands. The importance of early hours is inculcated. Indeed, every thing which favors the health is remembered by the teachers, and, so far as circumstances may permit, controlled and directed.

But the intellectual and moral habits of the pupils are also wisely regarded. Nothing struck me more than the cheerful love of order which seemed to prevail. It was not the order of a prisoner in the dungeon, but of the healthy, happy laborer. On the book containing the rules for each day, was written, in conspicuous characters, "*ORDER IS HEAVEN'S FIRST LAW*;" but it was written in characters scarcely less legible in their words and actions. In securing such order, I noticed several things which appeared to have no small influence.

Habits of punctuality.—When the hour arrives for opening the school, or for any exercise whatever, it is attended to. The teacher does not wait a few minutes beyond the time for tardy pupils—he is on the spot himself, and the work commences. In fact, he is often ready a few minutes before the time. The pupils know it, and they are convinced the teacher is in earnest. This makes *them* so.

Nothing is hurried.—This is, in part, an effect of the former habit. If "time is taken by the forelock," there is less need of hurrying. There will be time for every thing—and time to do it well.

Every thing has its place.—There is no time lost by looking for things which have become misplaced. This is economical and favorable to good order.

The teacher observes order himself.—Every word, every step, every performance—I had almost said every look of the teachers—inculcate order and system. And the powerful influence of example is too well known to need any encomiums.

I know not what other means of discipline may have been used in the seminary formerly; but am persuaded that those which have just been mentioned, have a very large share of influence, at present, in maintaining it. The *habit and love* of order and discipline *secure* order and discipline. So it is with motives to progress. The habit and love of acquiring knowledge, and of making improvement, appear to *insure* that knowledge and improvement, without the aid of emulation, which appears to be discarded. I know of no school for boys, where a better English education can be obtained.

Were it not in vain, I could wish that the fathers and mothers of New England might all spend a few days in this seminary. If a knowledge of its actual condition should lead to nothing more effective, it might induce many to send their sons there for a few years, to have the unspeakable pleasure of seeing them molded into teachers of high-minded purposes, and holy, self-denying character. May we not hope that a knowledge of what is effected at Andover will lead to the establishment of similar schools throughout New England—to be fountains of intelligence, and virtue, and piety?

LECTURES ON SCHOOL-KEEPING, by Samuel R. Hall, Boston, 1829, p. 135.

CONTENTS. *Lecture I.* Indifference to the importance, character, and usefulness of common schools; its origin and influence. *II.* Obstacles to the usefulness of common schools. *III.* Its requisite qualifications of teachers. *IV.* Nature of the teacher's employment. Responsibility of the teacher. Importance of realizing aid and understanding it. *V.* Gaining the confidence of the school. Means of gaining it. The instructor should be willing to spend all of his time when it can be rendered beneficial to the school. *VI.* Government of a school. Prerequisites. Manner of treating scholars. Uniformity in government. Firmness. *VII.* Government, *continued.* Partiality. Regard to the future as well as the present welfare of the scholars. Mode of intercourse between teacher and scholars, and between scholars. Punishments. Rewards. *VIII.* General management of a school. Direction of studies. *IX.* Mode of teaching. Manner of illustrating subjects. Spelling. Reading. *X.* Arithmetic. Geography. English Grammar. Writing. History. *XI.* Composition. General subjects, not particularly studied. Importance of improving opportunities when deep impressions are made on the minds of the school. *XII.* Means of exciting the attention of scholars. Such as are to be avoided. Such as are safely used. *XIII.* To female instructors.



Engr'd by T. B. Welch & A. B. Walter. Placed from the original Portrait by J. Neagle Esq

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V. JAMES WADSWORTH.

JAMES WADSWORTH,* the author of the Public School Library system in the State of New York, and a liberal benefactor and efficient promoter of popular education, was born in Durham, Connecticut, April 20, 1768, and was the youngest of his father's three sons. The emigrant to Connecticut, from whom the family descended, was a native of the County Palatine of Durham.

He was, as far as is known, brought up in the usual rustic alternation of labor and schooling, until his entrance into Yale College, where he graduated in 1788, with the degree of B. A.

Before his graduation, his father had died, and the two younger brothers, William and James, cast about for some better means of support than their small inherited estate could give. In the pursuit of this purpose, they consulted Col. Jeremiah Wadsworth, of Hartford, whose wealth, influence, and reputation, made him a sort of chief of those of his name, and who, although his relation to them by blood could not be traced, reckoned himself their kinsman.

Col. Wadsworth, having become interested in the "Phelps and Gorham purchase," owned large tracts of land in the then unsettled interior of New York, on the Genesee River; and he proposed to the brothers to purchase part of this land from him, and to become his agents for the management of the remainder.

This offer they accepted, and in so doing displayed remarkable foresight, and decision of character. Their own property consisted of land in Durham, worth some \$12,000 or \$15,000, but not very salable, and scarcely more than a basis for credit. They, however, bought a portion of Col. Wadsworth's estate, in the present townships of Genesee and Avon, on the eastern bank of the Genesee River, and set out upon their journey to settle it, in 1790. At that time, Little Falls, on the Mohawk, was the extreme limit of the main body of cultivated ground in New York. Small clearings were beginning to appear on the German Flats and at Cosley's Manor; a couple of white families, at the sites of the present towns of Utica and Geneva, earned a scanty living by trading with the Indians; and Phelps and Gorham had their land office at Canandaigua. With these exceptions, the

* The first part of the present article is transferred or altered from a Life of Mr. Wadsworth, by Prof. Renwick, in the "*Monthly Journal of Agriculture*," Oct. 1946.

whole region was a wilderness, rendered more dreary by the necessary ravages of Sullivan's army, and more dangerous by the rancor which those ravages had excited in the breasts of the warriors of the Five Nations, and which was kept up by the influence of traders from the fort at Niagara, over which the British flag still floated.

To encounter the perils of this position, and to bring their land into cultivation, the brothers hired a small band of hardy axemen, in Connecticut, and purchased a sufficiency of farming implements, and provisions to last until the first crop should ripen. The whole party, with its heavy incumbrances, ascended the Hudson to Albany—then often the voyage of a week—made the long portage through the pines to Schenectady; embarked in a *batteaux*, on the Mohawk, not yet improved even by the partial operations of the Western Land and Navigation Company; and followed its tortuous course to the western limit of cultivation. Here cattle were purchased for future stock and present support, and the party was divided into two, with one of which James continued the laborious task of threading nameless streams, shallow and encumbered by wood-drifts; while William undertook the still more difficult one of driving the stock through the forest. They were at last again united on a small savannah on the bank of the Genesee; a spot hardly altered in appearance even now, although overlooked by a flourishing town, and by unpretending though elegant mansions.

The bold and gallant bearing of William Wadsworth, and the sagacity, moral courage, and strict justice of James, won upon the neighboring Indian chiefs to such a degree that they were the means of averting the ruin which a disaster would seemingly otherwise have brought upon their enterprise. A house had been built with no tools but the axe, crops planted, and the cattle turned out to graze in the meadow. The forest was vigorously attacked, and a clearing rapidly made. But this was followed, in the autumn, by the enervating and unmanly attack of the ague. This, to the Connecticut men, natives of a country where it was entirely unknown, presented such terrors that the hired men broke their engagement, and hurried back to the older settlements, leaving the brothers almost or quite alone in their log cabin. In this situation, mere indifference on the part of their neighbor, Big Tree, chief of the Indian village on the Genesee, might have compelled them to follow their servants; but they obtained from him ready and efficient aid; given, however, for a satisfactory equivalent, and far more than repaid to his race in their waning fortunes.

Next spring more white laborers were engaged, and no further interruption occurred in the progress of the clearing.

The Indian corn of their first crop was beaten into meal, in a mortar, fashioned by the axe from the stump of a gigantic oak, whose pestle was swung on a long and pliant pole. In the progress of the clearing the falls of a small stream were reached, where a saw and gristmill, erected by the Wadsworths, formed the nucleus of the now flourishing village of Geneseo.

The success and gradual extension of the enterprise, and of the land agency business, led to a division of labor between the two brothers. William, stronger and with a better constitution, took the direction of the agricultural labors, and of much of the land office business; while James undertook the traveling needed for their own business, and for communicating with the landholders for whom they acted. That the latter found full employment, may be judged from the fact that the only method which seemed available for using the exuberant fertility of their meadows was the purchase, fattening, and sale of cattle. These were bought young and lean at the east, driven to Geneseo, and, when fit for market, again driven to the remote marts of New York or Philadelphia, or to Hornellsville, on the Susquehanna, thence to be transported, in "arks," to Baltimore.

Emigration to the west, again, had nothing of its later spontaneous movement and seeming fascination. It therefore became the duty of James Wadsworth to travel on horseback, through the most thickly inhabited parts of the country, and endeavor to find buyers for wild lands, or tenants for those already under cultivation, in the places of their birth.

The most ready to remove were the poorest; in many cases, those whose lands, by subdivision of inheritances, had become insufficient for their support. As these could often find no buyer for their property, it was often taken in payment for land in the Genesee valley, or for the outfit necessary to transport a family thither, and was then itself to be sold or rented. In some cases six acres of the virgin western soil were given for one of little better than a rock in New England; whose relative values, after fifty years, have certainly reversed, so that, while the objects of the Wadsworths completely succeeded, those who bought of them have increased their capital thirty-six fold.

The success of the brothers in drawing settlers to their own lands, and to those for which they were agents, being obviously due, in a great measure, to the personal address and business talents of James Wadsworth, caused him to be requested, in 1796, to proceed to England, for the purpose of interesting capitalists there in the lands of Western New York. This he accepted and filled with success; and,

by virtue of the high character of his principles, and the nature of his errand, gained admission into such society, and intercourse with such individuals as were most qualified to enlarge and improve the mind, and polish the manners of a young man of such good natural endowments, and so apt a disposition. Thus, his naturally prepossessing manner and address lost whatever they may have had of native provincialism, and gained their remarkable, and even cosmopolitan polish and refinement.

The results of Mr. Wadsworth's mission to Europe, in the purchase of great masses of land by capitalists there, and in the measures adopted to open them to civilization, and fill them with settlers, had effects on the prosperity of the region in which he lived little understood then and almost forgotten now. In direct contradiction to a common popular belief that great subdivision of landed property is best, and that ownership of large tracts of it is a public evil, it was the case that the region thus settled, opened out as it was by roads and bridges, and set with schools and churches, all liberally aided by these large owners, far outstripped, in improvement, the more accessible and equally fertile Military Tract, portioned out by New York among its revolutionary soldiers. The people of the former, in need of transportation for their surplus produce, enterprising and intelligent, and led by vigorous minds, formed the popular force, by wielding which, Clinton carried the decision to construct the Erie Canal, against the vote of New York and the river counties.

The foreign proprietors of lands in Western New York, drew their income and spent it at home. The Wadsworths, however, made it a rule to reinvest their profits at home, by purchasing land; so that, while portions of the original estate were sold, it was the case that more land than was sold was added to it.

By the death of Gen. William Wadsworth, James became the sole proprietor of the whole of this estate, which is probably the only instance, since the revolutionary war, of the investment of a fortune, earned by a whole life, solely in agricultural property. Most wealth acquired by trade in land has been invested in city lots, or in moneyed security. The enormous sums thus drawn from Western New York, and the additionally flourishing condition to which it would have risen, had they been reinvested at home, are scarcely conceivable.

The Wadsworth estate was partly kept in their own hands, partly leased, and partly cultivated on shares. The home farm, managed under their immediate direction, was about 2,000 acres, more than half being a rich alluvial *flat* on the Genesee, and was for many years the only portion which yielded any profit. This came partly from

cattle raising, and partly from the cultivation of hemp. Notwithstanding the value of the adjoining uplands for raising of wheat, grazing was always the chief object on the home farm, on the principle that grain could not be so well raised by hired labor; and the same reason prevented him from raising root crops.

The leaseholds, at first for two lives, were afterward changed to terms of years, which was the form subsequently used. These farms were usually of about one hundred acres, and the rents were fixed at a money standard, though almost never paid in money until the introduction of government funds in that region, during the war of 1812, and the subsequent establishment of banks there.

Farms larger than these were usually leased for shorter terms, and for one-third the grain crops, and a stipulated sum for portions not ploughed. Mr. Wadsworth looked for the same punctuality and good faith, in payment of rent from his tenants, that he used himself; and hence was, by the improvident or careless, reputed severe. But this was an unmerited opinion, as none acquainted with his benevolence and equable temper will doubt. And careful inquiries, made on the spot, justify the inference that his tenants were, on the whole, more comfortable, and laid up more money, than those who bought similar neighboring land on credit.

Mr. Wadsworth married, in 1804, Naomi Wolcott,* of East Windsor, Connecticut. Of his children by this marriage, three survived him. In his wife he found tastes and dispositions congenial to his own, and all who knew her had the highest opinion of her worth. Under her judicious management, in the difficult circumstances which beset housekeeping in a new country, the mansion at Geneseo was a model of orderly, generous, and unostentatious hospitality.

The loss of his wife, his brother, and a daughter, just married, shed a gloom over his later years; but he still took pleasure in gathering a circle of friends at Geneseo, during the season when it was readily accessible. Intelligent, well informed, and fond of intellectual conversation, he had, in a high degree, the power of drawing out and happily combining the conversational and social faculties of his guests. His visitors never felt *ennui*; and, though he laid no restriction upon games of chance or skill, it is said that none of them felt any desire for such amusements during the last twenty years of his life.

The success of Mr. Wadsworth's career was in great part due to his regularity and skill in business. By tact and method, he disposed, day by day, of his extensive business as farmer, owner, manager, land-

* Miss Wolcott was a daughter of Samuel Wolcott, Esq., and a cousin of the Hon. Oliver Wolcott, secretary of the treasury of the United States under Washington; both were lineal descendants from Henry Wolcott, one of the first settlers of Windsor, Connecticut.

lord, and agent, with so much ease as always to seem to be a man of leisure, and enabled him to command much time for reading and literary correspondence. His favorite study was political economy, but he kept himself informed of the progress of all the physical sciences; having gained a competent knowledge of the latter, although they were not even named in our colleges while he was a student.

His interest in such studies was enhanced by his perception of their value to agriculture; and, from the desire to extend a knowledge of this value, he often caused to be printed, for gratuitous distribution, select tracts on scientific subjects, either in general, or as applied to agriculture, or caused articles on similar subjects to be inserted in agricultural periodicals, and in newspapers. He pursued the same course for the advancement of common schools. His agency in such publications, in many cases, remained unknown, except to himself and the editors.

Mr. Wadsworth, though firm and distinct in religious convictions and doctrinal belief, was most catholic and unsectarian in feeling and action; although his reverence for religious truths, and his freedom in remarking upon clerical apathy or illiberality in relation to schools, have caused him, most groundlessly, to be charged with irreligion.

His instinctive modesty and sensitiveness caused him always to conceal his efforts for the public benefit; and seems also to have prevented him from seeking political distinctions, or taking an active share in party struggles. He voted with the federal party while it existed, but afterward took no part in the doings of the republicans, except so far as to maintain his conservative views.

His correspondence was voluminous, and especially so in the latter years of his life, when he wrote much on literary and scientific subjects, sometimes composing well-digested essays, particularly on those educational subjects which he had so much at heart. But his modesty has prevented any of these from being printed except one, and that without his knowledge. This was a letter on the civilization of the Indians, which its recipient permitted to appear in the newspapers.

In 1843, Mr. Wadsworth was sensible of a decline in his health, and soon became convinced that his disorder was incurable. Although certain of dissolution at no distant day, he tried a change of scene and air, in compliance with the wishes of his friends and children. He awaited the gradual approach of death with equanimity; and, though losing his accustomed interest in active pursuits, his intercourse with his friends was as cheerful as usual, or was saddened rather by their anxieties than his own. After returning to his residence at Geneseo, he died there, on the 7th of June, 1844.

MR. WADSWORTH'S EFFORTS IN BEHALF OF COMMON SCHOOLS.

A large measure of gratitude is due to James Wadsworth for his early, enlightened, and efficient efforts to promote the establishment and improvement of common schools in the State of New York.

In a letter addressed to John Lerickloin, Esq., dated January 30, 1796, giving the outline of a plan for the settlement of a tract of land, thirty miles square, he observes :—

I would propose that a one hundred and twenty acre lot be granted to the inhabitants (of each township,) for the support of the gospel, and a one hundred and twenty-five acre lot for the support of a school. Let the grant be conditional upon the inhabitants improving five acres a year, on each lot; the second and third years, ten acres a year thereafter, till one hundred acres shall be improved on each lot. The income of both to be applied to the support of a school, until a minister shall be settled. It is true the amount of two lots in each township will be considerable, but is observable that the stability of government, and of course the security of property in all republics, depend, in a great measure, upon the information of the common people.

Again, in a letter to Robert Troup, Esq. :—

It gives me great satisfaction to hear that you have determined to appropriate a piece of land for a meeting-house, and for a school-house, and likewise a glebe and parsonage for a minister. My mind is strongly impressed with the salutary consequences which will follow from these donations. It is a substantial benefit conferred upon the town (of Pulteney,) and in its consequences upon your country. I am not superstitious, but I believe in Christianity. I am no partisan, but I believe in the piety of patriotism, and, amidst the troubles of this wayward world, it appears to me that the mental consolation that attends advanced life is the recollection of substantial benefits conferred on our country, of having contributed our full mite to the improvement and happiness of our fellow-men; especially to that portion of them whose destinies are influenced, more or less, by our decisions, and by the situation in which, by Providence, we are placed.

I shall never forget the exalted part which Judge Benson took, in procuring from the Holland company, the grant of a school lot, and glebe lot, in each township of six miles square. * * It is true a single lot will not support a clergyman, or a single lot a school; but when cultivated they will do considerable toward these objects, and, what is of much consequence, they prove a constant incentive and support to a virtuous few in every town, till there is a majority in favor of supporting a clergyman and a constant school. Insure the support of schools, and children will be instructed. * * The State of Connecticut is under incalculable advantages to a law, long since passed in that state, requiring a yearly tax from each town; but, providing that a certificate from the school committee, stating that the amount of this tax has been applied to the payment of schoolmasters, under certain restrictions, shall be received in payment of the tax at the state treasury. This tax falls far short of supporting the schools, but it operates in the same manner as a constant fund, arising from a school lot. In its effects, it insures constant schools.

In a letter, dated December 28, 1811, addressed to John Murray, Jr., Esq., one of the commissioners appointed by Gov. Tompkins, in pursuance of a vote of the legislature, "to report a system for the organization and establishment of common schools," Mr. Wadsworth anticipates, substantially, the plan which was, in the following year, recommended by the commissioners, and adopted by the legislature. At the close of the letter, he adds :—"Make it the duty of the com-

missioners to send to the school inspector of each town a "*Lancaster Manual*,"* containing observations on teaching, and school government, and thus diffuse through the state the latest and most practical information as to improved methods."

In the same letter, he suggests that "teachers should be trained at Albany and New York, and sent through the state," or that "a suitable teacher should visit the schools of each county," and a sort of model or central school should be established in each county town. He adds a wish, "that an original genius would publish a weekly paper," devoted to the advancement of the useful arts and of schools.

In a letter addressed to Col. Samuel Young, dated January 16, 1826, Mr. Wadsworth suggests the establishment of county academies, for the education of schoolmasters.

It is an undoubted fact that there is an utter waste of half the expense of, and half the time passed in, our common schools. The evil, you will find, is extremely difficult to remedy; but it can and must be conquered. The evil is the ignorance and incompetence, and the object to be attained, the instruction of six thousand schoolmasters. This attained, the instruction of four hundred thousand youth will immediately follow. * * I take the liberty to make one or two suggestions which, or something better, I hope may lead to the eventual accomplishment of the desired object. Any single academy would be quite inadequate. The scheme to be effectual must embrace the instruction of an average of upward of one hundred schoolmasters in each of the fifty-seven counties.

The buildings once erected, the next step is, instructors for schoolmasters in each county. Here are difficulties. Suppose the county sustain a part, and individual subscription a part, of the expense. An important provision would be, that after say two years, no person, who had not passed say six months in the scientific school, should be allowed to teach a district school which received aid from the school fund.

The scientific instruction of the people does not seem to have been considered within the province of our colleges and our clergy. Yet, the man who is scientifically instructed is a double man. Whether he acts in Gen. Scott's regiment on the lines, or in a workshop, or on a farm, or in the cabinet at Washington. It is most desirable that a beginning should be made at the present season, and public sentiment will push it forward into practical usefulness.

In a letter to I. V. N. Yates, superintendent of common schools, dated January 25, 1826, Mr. Wadsworth urges the superintendent to recommend to the legislature to aid in the establishment of a scientific school in each county town, and "to offer a premium to every fit person, who shall attend that school one year, and receive a certificate of competency to teach, and an additional sum for his next year's services in keeping school, above what the district pays him."

Suppose that the legislature direct that \$20,000 or \$30,000 of the income be diverted from its present application, for a year or two, and be applied according

* Mr. Wadsworth shared with DeWitt Clinton, and other enlightened educators of that day, in sanguine anticipations of great and good results from the introduction of the monitorial system of Lancaster, both on account of its economy and its efficiency. In the above letter, he mentions that he had introduced it into a school in Geneseo, and adds: "Arkwright's discovery, and the subsequent improvement, are not more important to the manufacture of cotton, than Lancaster's system to an infinitely more important object, the education of our youth."

to the above hints, or on some better plan, for instructing schoolmasters. Make a beginning in each county town, where the good effects will be seen throughout the county, and rely upon it, the good sense of the people will perfect a practicable scheme for instructing the youth of this state in the arts and sciences. The teachers of schools are now going on in the beaten path, and are no more in fault than their mothers were for spinning cotton on domestic wheels.

To instruct a whole people in the first principles of the arts and sciences was never done or hardly dreamt of. Still, with an income of \$30,000 a year, and the monitorial plan of education, is it not perfectly practicable? With such an income, which is yearly increasing, ought not an experiment to be made?

Say that it would result in a visionary scheme, and that twenty or thirty thousand dollars is lost, it is only directing a loss from one channel into another. Double that sum is now yearly lost.

In a letter to Governor DeWitt Clinton, dated May 11, 1826, after requesting the Governor to examine a new "copy book," and encourage the publishers, Mr. Wadsworth remarks:—

There is quite an awakening in our western villages on the subject of education, and it is rapidly spreading from town to town. I am fully convinced the public mind will settle down in the establishment of a monitorial high school in every county in the state, in imitation of Professor Griscom's, to be furnished, in time, with a little philosophical apparatus. Nothing short of this is competent to the instruction of between seven and eight thousand schoolmasters; and it seems idle to talk of spreading knowledge by means of instructors who have not acquired knowledge. It will be no injury to a mason to become acquainted with the properties of air, nor to a millwright with the properties of fluids, and, I add, to the mighty mass of mind throughout the state, to reason correctly.

In a subsequent letter to Governor Clinton, dated December, 1826, he returns to the same subject:—

What is to be done to improve our common schools, is a subject worthy of all consideration, and is full of difficulties. I believe it is now generally conceded, that our common schools are comparatively good for nothing; that it may be almost said, without exaggeration, that they teach but little more than mothers could and would teach without them, notwithstanding the great amount appropriated for their support. Knowledge on school matters they do not possess, and knowledge they do not communicate. Yet, considering man in a statistical point of view, the powers of an educated are double those of an uneducated artisan. This certainly is unimportant, compared with the renovating influence of education. The amount appropriated yearly to the support of common schools, is competent to give a scientific education to the youth of this state, if properly applied. I am greatly desirous that a beginning should be made. We have upward of seven thousand school districts; to educate a corps of seven thousand schoolmasters is certainly a formidable undertaking, and the most zealous can only expect a gradual approximation to the desired object.

I am convinced that nothing short of the monitorial high school, in every county in the state, can effect the object in view. Suitable edifices for monitorial schools will cost from three to four thousand dollars. These might be built, partly by a county tax and partly by individual subscription; or, it appears to me perfectly just and reasonable to withdraw, for a season, a part of the school fund income, which is now doing very little good, and apply it to objects which will ultimately carry science into the common schools.

The state of our colleges ought, in some shape, to be brought before the public. These institutions, if they have not retrograded, have been stationary for the last twenty years. Instead of taking the lead, they have to be dragged along by public sentiment. What new idea, what improved modification of old ideas, what new suggestion in a department peculiarly their own—that of education—what advance in the arts and sciences (with one or two honorable exceptions), has been presented to society from our colleges, the last twenty years. The state has invested in college stock upward of a million dollars. This capital, with from

twenty to thirty dollars yearly tuition from each scholar, supports about thirty instructors, including presidents, professors, and tutors, and badly educates about three hundred and fifty students. Professor Griscom pays six-monthly interest on a capital of about twenty-five thousand dollars, and with a yearly tuition of from twenty to twenty-five dollars; educates six hundred youth, and in the branches taught educates them well. There seems to be something in incorporated colleges fatal to improvement. Whether it is, that the officers are hirelings for life, and bereft of the renovating influences of periodical elections; whether it is, that they are ex-officio deprived of the animating principles which lead to excellence in other situations in life, I do not attempt to decide; of the fact there can be no doubt. Our colleges are twenty years back of the lights of the age. And yet, it is the duty of the college officers to instruct our youth in ancient and modern science, and in the most recent improvements of this improving age. How far this duty is felt, or regarded, or executed, after inquiring, there can be but one opinion.

In a letter to P. C. Fuller, Esq., member of the house of the legislature, dated January, 1829, he urges the establishment, by legislative grant, of county high schools, with special reference to the education of schoolmasters.

To improve the common schools in this state, the employment of more able instructors is indispensable. It is idle to talk of employing graduates in our common schools. The article wanted does not exist. Our common schools teach little more than decent mothers teach—that is, to read and write very imperfectly. Our eight thousand schoolmasters do not possess knowledge and can not communicate knowledge. Before we have the commodity we want, we must manufacture it. County monitorial schools are intended, as tariffs on manufactures, to raise up a class of cheap (an indispensable condition,) and at the same time tolerably scientific and competent schoolmasters for each county of the state, but more particularly for the inland counties, into which a ray of science at present does not enter. Our eight thousand common schools form a noble theme for declamation; but it is a fact, and a fact well known to the members of the legislature, that our county schools are comparatively good for nothing; and it is equally a fact, that they will continue, for ages, inefficient and almost useless, without decided and intelligent legislation. We, no doubt, expend yearly, as the Governor mentions, \$232,000 in support of common schools; and it is equally true, that one-half this expenditure is literally a waste of money. The expenditure only serves to maintain a set of lounging, ignorant men, utterly incompetent to give instruction. Who is to blame? Not the trustees of the school districts. With the means they have, they employ the best men they can find. The article wanted has not been found; not for want of the expenditure of money, but because public attention has not been directed to this specific object. As a humble individual, the most important question I ever asked is, what are the elements of civilization? In pursuing this idea, can you make a forward movement in civilizing, and refining, and giving elevated and deep religious impressions to the great mass of community, without commencing with your schoolmasters? In my view of the subject, it is so important that something be done—that a beginning be made—that I would not be overscrupulous as to the provisions of the first law. These little manufactories will soon turn out articles so superior to those now in use, the importance and general application of these superior articles will instantly be felt in the mechanism of the body politic, that the system must and will progress. The commodity of all others the most needed in the State of New York, is educated men, men possessing knowledge. I take it, that it will not be disputed, that a little knowledge is quite requisite to make wise and just laws, and to explain and execute them in the infinite diversity of objects to which they apply and are intended to regulate. The want of educated men is not alone felt in our legislatures—it is felt in our county officers—it is constantly felt in every department of business.

I beg Mr. Hayden and yourself to fix your minds on this particular point. Can nothing further be done, or must we remain stationary? If you had the charge

of the schools in any one town or throughout the state, and of the money raised and actually expended, could you do nothing further? I anticipate your answer, that, with half the money expended, you could give a scientific education to the youth of this state. If this subject was fairly brought before the legislature, and fully explained, it would certainly receive their earnest and untiring attention. Imagine, if you can, any thing more beneficial in its results, more enduring as a source of constant satisfaction to yourselves, than to have commenced this great work, this forward movement in the amelioration of the human family.

In 1832, by Mr. Wadsworth's suggestion and efforts, aided by Mr. Fuller, of Livingston County, and the recommendation and co-operation of Mr. Flagg, the superintendent of common schools, the republication and distribution of Hall's "*Lectures on School-Keeping*" among the several school districts of New York was secured. In reference to this vote, he writes, May 4th, 1832, to Carter & Hendee, of Boston, the publishers of the work, as follows:—

I can not tell how much I am gratified in learning from Mr. Fuller, that a law has passed the legislature, authorizing Mr. Flagg, secretary of state, to place in the hands of the trustees of each school district in the state (about nine thousand,) a copy of Hall's "*Lectures on School-Keeping*." Great credit is due to Mr. Fuller and Mr. Flagg, for their exertions in procuring this enactment.

This law is the commencement of a great work in this state—the improvement of our common schools. Gov. Clinton, some years before his death, called up this subject before the legislature, and was unwearied in his endeavors to make a beginning. The extreme difficulty of the undertaking, which is nothing less than instructing and preparing nine thousand men for the responsible station of school-master, has hitherto dismayed and disheartened the warmest friends to the general diffusion of education. I consider these difficulties as half overcome, in the fact, that we have made a beginning, which will convince the wavering that something can be done, and which I have no doubt will call into the field new friends and increased efforts, and a vast improvement in our common schools will follow.

I have not the pleasure of being acquainted with Mr. Hall. At the time I purchased of you a number of copies of his lectures, last winter, I read them with great pleasure, and was at once convinced that they would lead to great meliorations in our common schools. I beg Mr. Hall to pardon me for suggesting, that I hope he will not spare any pains in his revised edition of his lectures. * * * I will venture, also, to express a hope, that the lectures will not contain a remark which can be tortured into sectarianism; still, as they are to be addressed to youth, they ought to abound with those moral and religious considerations which are common to all denominations.

In the same letter, Mr. Wadsworth recommends to these publishers to bring out a volume of "*Common School Lectures*," to be read by the teacher at the close of the morning and afternoon exercises of every day, on chemistry, political economy, principles of legislation, and especially "the principles on which good health depends and diseases are prevented and removed."

The operation of learning to write and read does not confer knowledge. The question before us is, how can useful and scientific knowledge be communicated to the youth in our common schools? Without elementary knowledge, man is but *half* a man; with it, man is a *double* man.

The course which I have recommended will do something toward the attainment of this great object, and that something will, no doubt, lead to further improvements.

In a letter to Mr. Flagg, dated June 14th, 1832, he refers to the subject and urges still other action:—

I take the liberty of inclosing, for your perusal, a copy of a letter I have lately written to Messrs. Carter & Hendee, booksellers in Boston.

I can not express to you how much I rejoice in the success of your own and Mr. Fuller's exertions, in causing the distribution of a copy of Hall's "*Lectures*" to every school district in this state. Though humble in a single case, in the aggregate it is a most noble beginning. You will recollect that I am an old laborer in this field, and, though frequently in utter despair, your success on this occasion has given me renewed spirits and fresh hopes. I have now no doubt that a conviction of the practicability, and most urgent necessity of improving our common schools, will become general in a few years, and from that period their onward course will commence. Gov. Clinton's mind was deeply impressed with this conviction. His remarks, in his last messages to the legislature, on improving our common schools, gave an impulse to, and inspired confidence in, the undertaking; but the noble work ceased with his death. And I think it not an inflated remark, to add that, if his recommendations in relation to our common schools had been carried into faithful execution, the beneficial effects to the rising generation, would not have been less than those which have resulted from his great work, the utility of which is now confessed by all. I beg you to pardon the liberty I take, in mentioning, that if your convenience will permit you to make a tour to the eastward, and pass a few days at Boston and in its vicinity, during the summer, you will perceive that our neighbors in Massachusetts are altogether ahead of us in their schools and courses of instruction. Their lyceum system of village and town lectures is literally working wonders in that state. This system will gradually make its way into this state—but a little aid from a few individuals would greatly accelerate its progress. * * *

How much have the common schools and schoolmasters, in the out-of-the-way counties in this state, advanced for the last twenty years? What operating cause can you point out, that will accelerate their advance for the next half century? * * * Our common schools have been and will remain stationary, without some special interference on the part of the more enlightened. Why has the population of Spain remained as it is for the last two hundred years? Why is the depressed state of our common schools passed over from year to year, and utterly neglected? On the state of our common schools depends the intellectual and moral state of the people at large of the succeeding generation. There are answers to these questions, and somebody ought to point them out. Is it because the members of our legislature and others, without the advantage of scientific education, are fascinated with the game and race of politics—the bull-fights of our country—and don't know how, or are unexcited and unwilling to give their attention to the slow and tedious process of raising the intellectual and moral character of the inhabitants of this state?

If it is a meritorious service to make two blades of grass grow, where only one grew before, how much more meritorious would it be, for the leading members of our legislature, with ample school funds in their hands (literally wasted for want of due application,) to raise, by a process as simple as the cultivation of two blades of grass, the intellectual character of the inhabitants of this state.

In a letter to Hon. William L. Marcy, dated 13th Dec., 1832, Mr. Wadsworth urges him to introduce the subject in his message to the legislature, in 1833.

If I am correct in my views, it is quite practicable to pass into the minds of our youth, scientific knowledge, scientific facts, and scientific reasons of thousands of physical phenomena, of constant occurrence through life. If, after a little reflection, you should approve the plan, at least so far as to make the experiment (the expense of the experiment would be too trifling for a moment's consideration,) I respectfully request you to call the attention of the legislature to the improvement of our common schools and to a distinct expression of your opinion, that scientific instruction may be introduced in our common schools, by means of lectures adapted to the capacities of children—the lectures to be read by the schoolmaster.

Gov. Clinton was fully convinced that something further could be done for our district schools, as will appear in two or three of his last messages. He speaks

of the useless repetition going on in our common schools. He might have justly added that, notwithstanding the vast expense and time spent, they teach little more than mothers teach, that is, to read and write—to read and write are only the stepping-stones, to knowledge. By cultivating the minds of youth, you give to the adult man twofold energies and powers, and thereby enable one man to do what otherwise would require the unskillful labor of two men. This is the true tariff—the legitimate tariff, which every government is in duty bound to enact, and to carry into faithful execution, for the benefit of its citizens. Certainly, the political prospects of that state are best, whose youth are best instructed.

The School District Library System, as it was finally introduced into New York, owes its origin and rapid extension to the unwearied efforts and the open liberality of Mr. Wadsworth. The distribution of Hall's "*Lectures*" to the several school districts, led to the very natural idea of supplying all the children, as well as teachers and parents, with other books suited to their capacity and wants. To accomplish this great object, Mr. Wadsworth availed himself of his correspondence with gentlemen who were situated to act efficiently on the public mind and the legislature, as the following extracts from his letters will show.

GENESEO, 23d July, 1833.

I wish some of you gentlemen who have leisure would write a series of short essays on the Common School Act. A historical sketch of the rise and progress of the common schools of New England, in connection with the great chapter on the civilization of man, would be a most useful work. We see what New England is with her common schools, very imperfect as they most certainly are—what would her citizens have been without their schools? Probably something like the peasants of Norway. This "School Act," as it is usually called, ought to contain a provision authorizing a majority of the voters to raise, by a tax on the property of each district, fifteen or twenty dollars as a commencement of, and five or ten dollars yearly as a perennial spring, to purchase and sustain a *school library*. How are your youth to acquire knowledge without books? They now do not read books when young, and have no distinct ideas when in advanced life, and yet you call on them to decide on treaties and constitutional questions. Some of these embryo libraries, by the donation of the benevolent, would become highly respectable.

To CHARLES KING, Esq.

GENESEO, August 20th, 1833.

It is clear you can not make competent citizens of our 500,000 youth without knowledge. And it is equally clear that knowledge can not be obtained without books. It appears to me to be an object to introduce a clause in the "School Act," authorizing, not requiring, a majority of the inhabitants of every school district to raise, by tax, say fifteen or twenty dollars as a commencement of a district school library, and five or ten dollars yearly to sustain it:—as these sums are so moderate that they would not alarm the most economical, and would not be felt, or scarcely perceived. These district school libraries, to be purchased by the trustees, would be a noble beginning toward a more general diffusion of knowledge. It will not be ten years before a weekly paper, devoted to the application of science and the arts to the useful purposes of life, will be sent to every school in the state. I have no doubt there are hundreds of individuals in this state who would cheerfully contribute toward this object, if its importance was brought home to their minds.

B. F. BUTLER, Esq.

GENESEO, 31st August, 1833.

DEAR SIR:—I send you a copy of a letter which I have recently addressed to Mr. Butler, and will thank you to lay it before Governor Marcy. I beg leave respectfully to invite the Governor's attention to the suggestions in my letter in relation to the district school libraries. I invite his attention at this time to the subject, because he will have an opportunity to converse with a great number of
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gentlemen on his way to Albany, and I am greatly deceived if every individual does not concur in the fitness and expediency of commencing, economically, little district school libraries.

Gen. LEVI HUBBELL.

GENESEO, September 20th, 1833.

DEAR SIR:—I am favored with your letter of the 16th inst. I send you a copy of my letter to Mr. Butler, and also one to Mr. Hubbell. My subsequent reflection, and the opinion of several intelligent gentleman, go to confirm me in my opinion in favor of district school libraries. I much hope Governor Marcy will recommend them in his message. Our school districts are moral entities. They are little societies. They are little republics. They are little nurseries of men and women, and our legislation ought to treat and regard them as such.

E. C. DELEVAN, Esq.

GENESEO, 25th August, 1834.

Among the few thoughts that have passed my mind, which I think worth repeating, is the suggestion which I took the liberty of making to his Excellency the Governor, before he delivered his *last winter's message*. I believe you read my letter. I refer to a juvenile library in each school district in this state. I proposed a clause authorizing the inhabitants of each school district to raise twenty dollars by tax, and five dollars yearly afterward, for a school library, to be selected by the trustees. This simple provision, unimportant in a single case, but full of importance and utility in the aggregate, the Governor did not recommend, and I do not know that it was called up to the attention of the legislature.

JESSE BUEL, Esq.

The subject was brought to the attention of the legislature by General Dix, in his annual report as superintendent of common schools, and on the 13th of April, 1835, the foundations of the district school library were laid by an act authorizing the taxable inhabitants of the several school districts to impose a tax, not exceeding twenty dollars for the first year, and ten dollars for each succeeding year, "for the purchase of a district library," consisting of such books as they shall in their district meeting direct.

Unwearied efforts were made to induce the inhabitants of school districts to raise the sum necessary to purchase a suitable number of books to constitute a library. Mr. Wadsworth offered to pay one-fourth of the twenty dollars in all the districts in Avon and Geneseo. The proposition was received with cold indifference. Twenty dollars were offered to the first five districts in Henrietta, which should act under the law, but the offer was not accepted for several years. The Rev. Mr. Page was employed by him to visit and give lectures on the subject in all the towns of Livingston County.

Finding that the process of introducing the libraries on the voluntary plan was slow, Mr. Wadsworth proposed to devote a portion of the income of the United States Deposit Fund in aid of district libraries, and to make it obligatory on the districts to tax themselves to the same amount, for the same object. His plan, substantially, was recommended by Governor Marcy, in his message, in 1838, and matured and advocated in a very able manner by the committee on colleges and common schools, of which Hon. D. D. Barnard, of Albany, was chairman. The bill reported by the committee became the district libra-

ry law of 1838, by which \$55,000 a year, for three years, were appropriated from the public treasury, out of the income of the United States Deposit Fund, and the same amount was required to be raised by direct tax, for the purchase of books in the several districts of the state. The bill was saved at a critical period by the exertions of Hon. G. W. Patterson,* who was then speaker of the house. In 1839, the operation of the law was extended to five instead of three years, and at the expiration of that time, it was made permanent.

"New York," remarks Hon. Henry S. Randall, of Cortland county, in his report on district school libraries, in 1844, "has the proud honor of being the first government in the world, which has established a free library system adequate to the wants of her whole population. It extends its benefits equally to all conditions, and in all local situations. It not only gives profitable employment to the man of leisure, but it passes the threshold of the laborer, offering him amusement and instruction after his daily toil is over, without increasing his fatigues or subtracting from his earnings. It is an interesting reflection that there is no portion of our territory so wild or remote, where man has penetrated, that the library has not peopled the wilderness around him with the good and wise of this and other ages, who address to him their silent monitions, cultivating and strengthening within him, even amidst his rude pursuits, the principles of humanity and civilization. This philanthropic and admirably conceived measure may be justly regarded as, next to the institution of common schools, the most important in that series of causes, which will give its distinctive character to our civilization as a people."

* In answer to a letter of inquiry, written in 1842, as to the origin of the Library System, Mr. Patterson replied as follows: "In regard to the origin of the School District Library System of this state, I will say to you, that the whole credit belongs to Hon. James Wadsworth, of Genesee, who first suggested the plan to certain members of the legislature, in 1833, and, through his urgent solicitation, a law was passed in that year, authorizing the several school districts in the state to raise the sum of twenty dollars, by tax, the first year, and ten dollars each succeeding year, for the purchase of a district library. A few districts availed themselves of the benefit of the law, but a large portion kept their eyes and purses closed against the provisions of that act. In 1838, when the legislature was about to appropriate the income of the United States Deposit Fund, another effort was made by the same distinguished individual, to induce the members to make suitable provisions for district libraries. In this he was also successful, and the sum of fifty-five thousand dollars annually, for three years, was appropriated for district libraries, with a provision requiring the towns and cities in the state to raise an equal sum, for the same purpose; and, by the act of 1839, the appropriations were extended to five, in place of three years, and at the expiration of that time it will be for the districts to determine, whether that portion of the public money shall be used for the purchase of books, or for the payment of teachers' wages.

In regard to the part I took on the subject of libraries, I have only to say it was a very humble one. The act of 1839 was violently opposed, and required great efforts, on the part of the friends of the bill, to effect its passage. In this effort I only endeavored to do my duty, and my whole duty, and I never supposed that any thing that I said or did, would excite sufficient interest to make any portion worth preserving.

The credit of all that has been done belongs to the praiseworthy efforts of Mr. Wadsworth."
To Henry Barnard, Esq.

The appearance of Mrs. Austin's translation of Victor Cousin's "*Report on Public Instruction in Prussia*" was welcomed by Mr. Wadsworth, as an example of what could be done under a despotic government for the organization and practical working of a system of public schools, comprehensive, thorough, and universal, and at the same time, as an argument and stimulus for the introduction here of a similar system, modified in its details of studies and management, to suit the conditions of our society and political institutions. He accordingly encouraged its republication, by taking a large number of copies for distribution among his correspondents, school officers, and active friends of education in different states. Probably no other educational book, for the ten years following its publication, furnished, directly and indirectly, more material in facts and suggestions, for elaborate reviews, newspaper essays, public addresses, and official reports in the wide field of educational discussion, or did more to enlist men of the highest order of mind in the work of school improvement.

When Mr. J. Orville Taylor commenced, in May, 1836, the publication of a "monthly paper for the improvement of common school education," with the title of "*The Common School Assistant*," Mr. Wadsworth encouraged the effort by a liberal subscription, and by an annual contribution to enable the editor to visit different parts of the country, and lecture on the subject to which the periodical was devoted. On the discontinuance of "*The Common School Assistant*," and the appearance of Mr. Francis Dwight's "*District School Journal for the State of New York*," in March, 1840, Mr. Wadsworth immediately ordered the "*Journal*" to be sent, at his expense, to every clergyman in Livingston County, and, from time to time, paid the entire cost of publishing editions of twenty thousand copies of certain numbers, devoted to important subjects. Among these extra issues was a number devoted to the "construction of school-houses, with plans," made up from Mr. Mann's and Mr. Barnard's reports on the subject; Mr. Mann's "*Fifth Annual Report as Secretary of the Board of Education of Massachusetts*," devoted to an exposition of the difference in productive power and pecuniary returns between educated and ignorant labor; and Mr. Barnard's "*Report on a System of Common Schools for Cities and Large Villages*," with a full account of the organization and working of the public schools of Boston, Salem, Lowell, Nantucket, Roxbury, Newburyport, Charlestown, Worcester, Philadelphia, Lancaster, Cincinnati, Portland, and New York. These numbers of the "*Journal*," each equal to a pamphlet of one hundred pages, scattered broadcast over the state and the country, contributed largely to the advancement of common schools.

Soon after the distribution among the school districts of New York of Hall's "*Lectures on School-Keeping*," Mr. Wadsworth conceived the plan for introducing improved text-books into the schools, by inducing the best writers of the country to compete in their preparation, and then by publishing them in such a manner as to afford them to parents at the lowest possible cost of manufacture. For this purpose he placed the sum of thirty thousand dollars in trust, a portion of which was offered in premiums for the best elementary treatise on certain specified subjects, and the balance was to be expended in stereotyping the successful treatises. The umpires,—men of the highest political standing, and of unquestioned integrity, were too much occupied with their regular avocations, and too little acquainted or too little interested in the object in view, to execute the trust effectually, and the result was an expenditure of many thousand dollars to no apparent good purpose. But the failure of that plan led to the preparation and publication, in 1842, of one of the most valuable contributions to our educational literature,—"*The School and the School-master*." The First Part, on the school, its objects, relations, and uses, with a sketch of the education most needed in the United States, the present state of common schools, the best means of improving them, and the consequent duties of parents and school officers, was prepared by Prof. Alonzo Potter, of Union College (now bishop of the Episcopal church of Pennsylvania.) The Second Part,—on the proper character, studies, and duties of the teacher, with the best methods for the government and instruction of common schools, and the principles on which school-houses should be built, arranged, warmed, and ventilated, was prepared by Mr. George B. Emerson, of Boston. Mr. Wadsworth paid, out of the unexpended balance of the trust fund above described, to each of the authors a liberal compensation for their copyright in the work, and then paid the entire expense of publishing an edition of fifteen thousand copies for distribution among the eleven thousand school districts of the State of New York, and among his friends, and the active promoters of educational improvement in the different states. By this liberal expenditure, the wise instructions of two such masters of education as Bishop Potter and Mr. Emerson have already reached thousands of teachers and parents, and tens of thousands of children and youth, and will continue to do so in all future time.

Mr. Wadsworth was all his life a liberal contributor to the erection of school-houses and churches, in his own town and county, and to every object of educational improvement. His annual donations in aid of lecturers on scientific topics amounted to a large sum. Before

his death he erected, in the village of Geneseo, a building for the accommodation of a public library, and of apparatus for illustrating scientific lectures,—supplying both the library and the apparatus at his own expense, and endowing the institution with the sum of ten thousand dollars, for the increase of its means of instruction.

In these and other ways, it is estimated that Mr. Wadsworth expended over ninety thousand dollars in the advancement of popular education, besides the greater service of the example of a gentleman of large estate, and the highest social position, taking a constant personal interest in the welfare of his fellow-men, and administering his own charities with the same careful attention that he paid to the management of his estate.



J. G. Carter



J. H. Miller

VI. JAMES G. CARTER.

JAMES G. CARTER, to whom more than to any other one person, belongs the credit of having first arrested the attention of the leading minds of Massachusetts, to the necessity of immediate and thorough improvement in the system of free or public schools, and of having clearly pointed out the most direct and thorough mode of procuring this improvement, by providing for the training of competent teachers for these schools, was born in Leominster, Massachusetts, Sept. 7th, 1795. His father's house was on the family homestead, first settled by his grandfather, in 1744, and on a rise of land called, from the owner's name, Carter's Hill.

Up to the age of seventeen he lived the ordinary life of a New England farmer's son; alternating between the summer's work and the winter's schooling, which was all the education that his father's means would allow. At that age he quietly formed the resolution of paying his own way through a preparatory course, at Groton Academy, then under the care of that well-known and respected teacher, Caleb Butler, and a collegiate course at Harvard College; which he accomplished, earning his money by teaching district school and singing school, and by occasional lectures upon the mysteries of their craft before masonic lodges.

He was always on good terms with his class-mates, and among the foremost in his studies. His most intimate friend among them all was the celebrated Warren Colburn. Indeed, much of the methodizing of Mr. Colburn's "*First Lessons in Arithmetic*," was derived from the author's constant consultations with Mr. Carter, who discussed and decided with him, among other questions, that whether problems of a concrete nature should precede the more abstract. The conclusion was that they should.

Mr. Carter graduated at Harvard, in 1820, having spent the preceding winter in teaching at Cohasset, Mass. The school was composed chiefly of young seamen, who improved the winter months in searching for a "northern passage" to learning. They had mutinied under several former teachers, and Mr. Carter's services were secured because of his reputation in discipline. Many of the pupils were larger and older than the master—but the resolute eye, and self-possessed manner of the latter as he took his seat at the desk, and, after

a few words, began to read aloud from a book which lay before him, arrested the attention, and excited the interest of the former, and formed the first link in a chain of influences by which he secured their ready obedience, and devout attachment. The pupils and the committee, at the close of the term, united in a letter of thanks for his valuable services to the district.

On leaving college, Mr. Carter opened a private school, in Lancaster, Mass., where he received into his own family many "suspended" students from Harvard College, and correcting the errors and supplying the deficiencies in the education, both moral and intellectual, of this class of pupils, he had an opportunity of pursuing still further the study of the great subject of instruction, and maturing his own views as to the thorough and radical improvement of schools. To his mind education developed itself as a science, and teaching as an art, and to the dissemination of correct views on these points, he addressed himself with the enthusiasm of an original thinker, and a practical man.

His first publication in behalf of popular education appeared in the Boston newspapers, in 1821, and from time to time through the same channel, until 1824, when he issued, in a pamphlet of one hundred and twenty-three pages, his "*Letters to the Hon. William Prescott, LL. D., on the Free Schools of New England, with Remarks on the Principles of Instruction.*" In these letters, Mr. Carter traces the history of the legislature of Massachusetts, respecting free* or public schools—points out the condition of the schools, and dwells on the depressing influence which the establishment of academies and private schools, and the neglect of public grammar or town schools had exerted on the common schools. The original school policy of Massachusetts contemplated the establishment in every large town of at least one school of a higher grade of studies than the district school, with a teacher of college qualifications, so as to bring the means of preparing for college within the reach of the poor, and, at the same time, of qualifying teachers for the district schools. By degrees the requirements of the law were relaxed, until by degrees the place of the town grammar school was filled by an incorporated academy. In view of this state of things, Mr. Carter remarks:—

What would our ancestors have thought of their posterity, those ancestors, who, nearly two hundred years since, amidst all the embarrassments of a new settlement, provided by law for the support of grammar schools in all towns of one hundred families, "the master thereof being able to instruct youth so far as they

* In the early legislation of New England, *free* schools meant *endowed* schools, and generally, schools intended for instruction in Latin and Greek. They were intended to occupy the place of the grammar schools of England. The name was afterward given indiscriminately to elementary and grammar schools.

may be fitted for the university?" or what would our fathers have thought of their children, those fathers who, in 1780, enjoined it in their constitution, upon "the legislatures and magistrates, in all future periods of this commonwealth, to cherish the interests of literature and the sciences, and all seminaries of them; especially the University at Cambridge, public schools, and grammar schools in the towns;" if they could have foreseen, that after one relaxation and another, in forty years, those children would so far forget their duty to "cherish the grammar schools," as to strike them out of existence? What the peculiar condition of the people of this state is, which renders the support of this class of schools unnecessary, impolitic, or unjust, I have never been able to understand. And, although I have been at some pains on the subject, I have never yet learned what the arguments were, which carried the repeal of the law through the last general court. Arguments there must have been, and strong ones, or such an alarming innovation would never have been suffered, upon an institution, to which the people, till quite lately, have always expressed the strongest attachment. Was that class of schools considered unnecessary? If so, what has made them unnecessary? Either the people have no longer need to receive the kind of instruction those schools were intended to afford, or they must receive the same instruction in some other way. The policy, and in our government, the necessity of eliciting the talents of the country, by every possible means, will be demonstrated when we consider how many of our most distinguished jurists, statesmen, and divines, have received their early instruction in the primary and grammar schools of some obscure country village. None, I believe, can be found, who will say the people have no longer need of such facilities for bringing forward to notice the promising talents of their children, and of giving to our country some of its greatest benefactors. Then by abolishing the grammar schools, it is expected the people will receive the same instruction in some other way. But two possible sources occur, which promise in any degree to supply the chasm in the system. The primary schools on the one hand, and the academies on the other. Neither of these sources will answer the expectation, or be adequate to the purpose. The primary schools will not come up to the necessary standard, either as they are contemplated by the law, or as they are, and promise to be, supported by the people. And the academies are out of the reach of precisely that class of people who most need the encouragement offered by the late grammar schools. The effect of the repeal of the law upon the primary schools, is as yet, but matter of conjecture. It is probably expected by some, and it is certainly to be hoped by all, that striking from the system the class of schools immediately above them, they will be improved so as in some degree to supply the place of the higher schools. If this expectation had any foundation, or if there were any probability it would be realized in some good degree, it would not be so much a matter of regret, that the late measure was adopted. But several reasons induce me to believe that the expectation is altogether visionary; and that the measure will have a tendency to sink, rather than improve, the condition of the primary schools.

But it may, perhaps, be said, the qualifications of the instructors are as high, for all practical and useful purposes, as they were under the former law, as it was executed. In the first place, it is not fair or just to reason from the law as it *was* executed, rather than as it *should have been* executed. In the next place, allowing ourselves so to reason, we shall not, I believe, arrive at the same result. The qualification of the grammar schoolmasters were, that they should be "of good morals, well instructed in Latin, Greek, and English languages." This class of schools is now abolished, and "geography" is added to the former qualifications of the teachers of primary schools. Allowing the two classes of schools to have been perfectly amalgamated, which is a great concession in point of fact, as well as acknowledging a great perversion of the law; we have dispensed with Latin and Greek, and require geography in their stead. I have no desire to lessen the estimation in which geography is held as a study peculiarly adapted to our primary schools. And I am ready to concede, that probably ten will wish to study geography where one would wish to study Latin and Greek. Now, if an instructor, who is qualified to teach Latin and Greek, could not by any possibility be qualified, at the same time, to teach geography, and all the minor studies of our schools, I should consider myself as having conceded the whole argument. But this is not the fact. These qualifications are so far from being incompatible, that

they *generally* exist in a superior degree in connection with each other. The connection, to be sure, is not so essential, that a man may not be a very good teacher of Latin and Greek, and still know very little of any thing else. Still, as the studies are arranged in all our schools, academies, and colleges, where young men are prepared for teachers, all the elementary studies, including geography, are generally taught before the languages. So that, by adding them to the qualifications, even if it were never required of the instructors to teach them, we insure more mature and accomplished scholars in those branches which are more frequently and generally taught. I would not be understood to discuss, much less to approve, this arrangement of studies for those destined to be scholars by profession. Such arrangement exists, and I avail myself of the fact for my present purpose. But besides insuring better teachers for the common branches, there are always some who would attend to the languages, as preparatory to a public education, if they had opportunity. And, if affording the opportunity to all of every town, should be the means of drawing out but few of superior talents, even those few are worthy of the highest consideration and regard from the public who possess them. These and similar considerations, which I can not here state, have convinced me, I know not whether they will convince any one else, that the repeal of the grammar school law, even if we could never hope it would be executed upon a more liberal construction than it has been for the last ten years, will have a direct tendency to sink the condition and prospects of the primary schools.

As the academies are not entirely free schools, we can not calculate upon *them* to supply instruction to the mass of the people. These are most respectable establishments, and some of them are hardly inferior, in the advantages they afford for acquiring a thorough education, to some institutions which are dignified with the name of colleges. It is not desirable that their condition should be impaired. Nor need any fears be entertained that their condition will be impaired. There are enough in the community who duly estimate the advantages of a good education, and who are able to sustain the expense of these schools to insure their permanent support. And as the other classes of schools which are free, are annihilated or decline in their character and condition, the academies will be encouraged by those who can better appreciate the advantages of good schools, and better afford the necessary expense. So far as it regards the accommodation and pecuniary interest of the rich, and those of moderate property, it is matter of indifference, whether the legislature or public make any appropriations or provisions for schools or not. They can and will take care for themselves. These are not the classes of the community to suffer, when government withhold encouragement from the schools. It is the poor who are to suffer. They must educate their children in *free* schools, and in their own neighborhood, or not educate them at all. The expense of tuition, of books, and of board at the academies are so appalling, as to put the advantages of those schools quite beyond the power of a vast proportion of the community. In the towns where academies happen to be fixed, the poor will of course derive some increased advantages; but these towns are so few compared with the whole, and the incident expenses for books and tuition are so considerable, that for all purposes of directly and efficiently educating the whole mass of the people, the academies may be left out of calculation. For not one in twenty, if one in fifty, throughout the state, will ever find their way to any of them.

From the external organization of the system, Mr. Carter passes to the consideration of the defects of the schools, and the means of improvement.

Two principal causes have operated from the first establishment of the free schools to impair and pervert their influence: incompetent instructors, and bad school books. It is not a little surprising, that a public so deeply impressed with the importance of the system of schools, and so resolved to carry it into full operation, by liberal appropriations, should stop short of their purpose, and stop precisely at that point, where the greatest attention and vigilance were essential to give efficacy to the whole. I do not mean that much good has not been realized; on the contrary, as has been repeatedly remarked, the success of the free school system is

just cause of congratulation; but I mean that their influence has not been the greatest and the best which the *same means*, under better management, might produce.

The employment of incompetent and inexperienced instructors has probably arisen more from the peculiar situation of the country, than from any negligence or indifference on the subject. So many opportunities are open for industrious enterprise, that it has always been difficult to induce men to become *permanent* teachers. This evil, although a serious one, is one which can not at present be removed; but its bad effects may be more qualified, by raising the character and acquirements of instructors to a higher standard. The whole business of instruction, with very few exceptions, has hitherto been performed by those who have felt little interest in the subject, beyond the immediate pecuniary compensation stipulated for their services. And even that has been too inconsiderable, to render a want of success in the employment, a subject of much regret. This remark applies to almost all instructors, from the primary schools up to the higher schools; and it has no very remote bearing even upon some of the instructors in our colleges. Three classes of men have furnished the whole body of instructors.

1st. Those have undertaken to teach, who had no better reason for it, than that the employment is easier, and perhaps a little more profitable than labor. No doubt many excellent instructors belong to this class. A college education is by no means essential to a good teacher of a primary school. But it must be confessed, that many of this class have been most lamentably deficient in those literary qualifications which are *essential* to any instructor; and, perhaps, still more deficient in their notions of decency and propriety, which never approach to refinement in manners. In the same degree, the schools may be made a most efficient instrument for improving and elevating the state of society when under the direction of men who have themselves been properly taught, they may be the means of disseminating or perpetuating grossness in manners, and vulgarity, when under the direction of different characters.

2d. A second class are those who are acquiring, or have attained a public education; and who assume the business of instruction as a temporary employment, either to afford a pecuniary emolument for the relief of immediate necessities, or to give themselves time to deliberate and choose some more agreeable and profitable profession. /This is, probably, the most useful class of instructors; although their usefulness is much impaired by a want of experience and engagedness in the business. The thought that the employment is temporary, and that their ultimate success in life is not much affected by their success as teachers, can not fail to weaken the motives to exertion, and discourage the sacrifices necessary to the successful teacher. The duties of the instructor are so arduous, under the most favorable circumstances, that he needs all the motives to perseverance, which exclusive devotion to the business or self-interest can suggest. His prospects of happiness and respectability in life, therefore, should be more identified with his success as a teacher.

3d. The third class is composed of those who, from conscious weakness, despair of success in any other profession, or who have been more thoroughly convinced, by unfortunate experiment, that they can not attain distinction, perhaps even subsistence, by any other means. There may no doubt be found individuals among this class who are respectable and useful instructors. But as a class, they are the most exceptionable of the three. To develop the powers of the human mind, in the most successful manner, requires a discrimination and judgment which it seldom falls to the lot of men of indifferent talents to possess. In the science of instruction there is full scope for the best talents, and largest acquirements. All the elevated qualities, either of mind or heart, which are necessary to insure success in any of the professions, are essential to the accomplished instructor. And some qualities are required which are not so important in any other profession. How can he hope to arrange and adapt the studies of a child, so as to call forth and strengthen the different powers of the mind, in their natural order, and in the most successful manner, who is not capable of enumerating those powers; much less of analyzing them and understanding their mutual relations and dependencies. Such, however, is the present condition of our country, so numerous are the demands for instructors in the primary and higher schools, and so various are the *private interests* which will be felt in the selection of

them, that it is, probably, too much to expect all to have the discrimination necessary, in order to become accurate and original observers of the phenomena of the youthful mind. But we have much to hope from those who can better appreciate the importance of a correct system from instruction, from the encouragement of individuals, and the patronage of those large towns which carry education to its greatest perfection. It is to these sources we must look for the first examples in improvement.

A large portion of the "*Letters*" was devoted to an advocacy of the introduction of the principles of inductive logic into all the different branches of education, which he illustrates by examples of inductive teaching in the languages, in geography, and in arithmetic; the last as exhibited in W. Colburn's "*First Lessons*." The "*Letters*" conclude with the following anticipations of the progress of education in this country:—

The science of instruction is the sphere, and our country is the place for free and unembarrassed exertion. Hope certainly gives us a bright and animating prospect in the distance. The subject of education has never excited so deep and lively an interest, in every part of our country, as at present. If this interest can be directed by the wisdom and experience of the more enlightened, it can not fail of a great and happy effect. The importance of the subject has long since been felt; the time has come when attention should be turned to the nature of it. We may then hope for those improvements of which the subject is susceptible; and those splendid results in the state of society, which the more ardent and philanthropic anticipate. But science now sits solemn in her temple afar off. The ways of approach are dark and devious. A few votaries only, by chance or untired perseverance, gain access, till, at the expense of half their lives, they are warned by experience, like an inspiration from above, to become as little children, that they may enter. But when the influence of education is more duly estimated, and when the cultivation of the head and heart shall be united, and form one distinct and dignified profession, drawing to its practice the greatest and best of men; we may then hope a proper direction will be given to the opening minds and expanding hearts of the young; and that all the deep and permanent prepossessions of childhood and youth, will be upon the side of truth and virtue. Science, philosophy, and religion will then be blended with their very natures, to grow with their growth, and strengthen with their strength. The whole earth will then constitute but one beautiful temple, in which may dwell in peace all mankind; and their lives form but one consistent and perpetual worship.

The publication of the "*Letters*" was followed in the winter of 1824-25, by a series of "*Essays upon Popular Education*," over the signature of Franklin, in the Boston Patriot, in which Mr. Carter aimed to present the condition, and the means of improving its public schools, in a manner to be appreciated by the people. These essays attracted a large measure of public attention, as originally published, and when issued in a pamphlet of sixty pages, in 1826, under the title of "*Essays upon Popular Education; containing a particular examination of the Schools of Massachusetts, and an outline for an Institution for the Education of Teachers*." In this series of essays he first gave to the public his plan of a teachers' seminary. These essays, and particularly his views on the principles of education as a science, and his outline of an institution for the education of teachers, attracted much attention. They were very

ably and favorably reviewed in the Literary Gazette, edited by Theophilus Parsons, and of which journal Mr. Carter was editor, in 1826, and devoted a portion of the columns to the advocacy of educational improvements before the public. The essays were made the basis of an article in the North American Review, in 1827, by Prof. Ticknor, and through that article his plan was made known to the English public. Prof. Bryce, in his "*Sketch of a Plan for a System of National Education for Ireland*," published in London, in 1828, speaks of the "outline," as the "first regular publication on the subject of the professional education of teachers which he had heard of."

In the preface to the "*Essays*," Mr. Carter pointed out the disastrous consequences of the neglect of timely legislation in behalf of free or public schools.

The free schools, strange as it may seem, had received almost no legislative attention, protection, or bounty, for nearly forty years. Of course, instead of taking the lead in improvement, as they should have done, they remained as nearly stationary as any institution can remain, in such an age and such a state of society, as those in which we live. Some men of longer foresight, and many, whose interest in the subject was quickened by their having families to educate, saw and lamented this state of things; but, as it was less trouble, on the whole, to build up schools of their own, than to reform those already in existence, they sent in their petitions to the legislature in great profusion for acts of incorporation, and for pecuniary assistance to enable them to establish academies under their own direction. These petitions were usually granted; and donations, small ones to be sure, were made to further their objects. But the obvious tendency of this course of legislation was to help directly those citizens who least needed help, and to encourage precisely that class of schools which, if they were necessary, would spring up spontaneously without the aid of legislative bounty.

Within a few years, even these higher schools, from their unwieldy organization, have ceased to afford such instruction as the public require; and private establishments begin now to take the lead of them. Thus have we departed more and more widely from the principle assumed by our fathers in the establishment of the free schools, viz., to provide as good instruction in all elementary and common branches of knowledge for the poorest citizen in the commonwealth as the richest could buy with all his wealth. Advancement upon advancement has been made by a few, while the mass, who are less vigilant, remain as they were, with only the unconsoling advantage of a little reflected light sent back by those who have gone before them.

The influence of academies on the free or public schools is thus pointed out, and the experience of every New England state, both before and since, confirms the justice of Mr. Carter's view:—

One influence, which they undoubtedly have had, has been to prepare young instructors *some* better than they could be prepared in the town schools themselves. This is a good influence. And if the same object could not be attained much better by other means, it would deserve great consideration in estimating the utility which we are to expect from those establishments for the future. But the preparation of instructors for the free schools never formed a part of the original design of the academies. They were intended to afford instruction in other and higher branches of education than those usually taught in the free schools; and not merely to give better instruction in the same branches. Much less did it come within the wide scope of their purposes to give instruction in the science of teaching generally. So that the little good derived from them in this respect is only incidental.

But the academies have had another influence upon the public town schools, which has much impaired their usefulness, and, if not soon checked, it will ultimately destroy them. This influence, operating for a series of years, has led already to the abandonment of a part of the free school system, and to a depreciation in the character and prospects of the remaining part. And it is working, not slowly, the destruction of the vital principle of the institution, more valuable to us than any other, for the preservation of enlightened freedom. The pernicious influence, to which I allude, will be better understood by taking an example of its operation on a small scale; and then extending the same principle of examination to the whole state, or to New England.

Take any ten contiguous towns in the interior of this commonwealth, and suppose an academy to be placed in the center of them. An academy, as I have before observed, commonly means a corporation, with a township of land in Maine, given them by the state, and a pretty convenient house, built generally by the patriotic subscriptions of those who expect to use it; the instructor being supported, chiefly or altogether, by a separate tax on the scholars. In each of these ten towns, select the six individuals, who have families to educate, who set the highest value on early education, and who are able to defray the expenses of the best which can be had, either in a private school among themselves, or at the academy, which, by the supposition, is in their neighborhood. Now of what immediate consequence can it be to the six families of each town, or to the sixty families of the ten towns, whether there be such a thing as a free school in the commonwealth or not! They have a general interest in them to be sure, because they have themselves been there instructed, and the early associations of childhood and youth are strong; and they have a sort of speculative belief, if it be not rather an innate sentiment, that free schools make a free people. But how are their own particular, personal, and immediate interests affected? Without any libel upon good nature, these are the main springs to human actions. These are the motives which find their way soonest to the human heart, and influence most powerfully and steadily the opinions of men, and the conduct founded upon and resulting from them.

As soon as difficulties and disagreements, in regard to the free schools, arise, as they necessarily must, upon various topics; such as, the amount of money to be raised, the distribution of it among the several districts, the manner of appropriation, whether it be to the "summer schools" or to the "winter schools," to pay an instructor from this family or from that family, of higher qualifications or of lower qualifications, of this or that political or religious creed, or a thousand other questions which are constantly occurring; if any of our six families happen to be dissatisfied or disgusted with any course which may be adopted, they will, immediately, abandon the free schools, and provide for the education of their children in their own way. They may organize a private school, for their own convenience, upon such principles as they most approve. Or, they may send their scholars, at an expense trifling to them, to the academy in their neighborhood. Well, what if they do? The free schools remain, all taxes are paid cheerfully for their support, and the number of scholars is lessened. What is the evil of their sending their children somewhere else to be educated? We should, at first, suppose that it would be an advantage; inasmuch as the amount of money to be expended would be left the same, and the number of pupils to receive the benefit of it would be considerably diminished.

But the evils of this course, and of the general policy of the state government, which has led to it, are very serious ones. When the six individuals of any country town, who are, by the supposition, first in point of wealth and interest in the subject, and who will generally be also first in point of intelligence and influence in town affairs, withdraw their children from the common schools; there are, at the same time, withdrawn a portion of intelligence from their direction, and heartfelt interest from their support. This intelligence is needed, to manage the delicate and important concerns of the schools. And this heartfelt interest is needed, to lead the way to improvements, to stimulate and encourage larger and larger appropriations, and to insure vigilance in their expenditure. Patriotism and philanthropy are dull motives to exertions for the improvement of common schools compared with parental affection. And this quickening power has gone off to the academies or somewhere else with the children, who are the objects of it.

Look at the operation of this influence of the academies upon the free schools, on a still smaller scale. Examine the condition of the latter in the very towns where academies are placed; and where, if their influence be a happy one, we should expect to find the common schools in the best condition. What is the fact? From observation and from information, collected from authentic sources, the assertion may be hazarded that the condition of the free schools will be found, on examination, to be worse, far worse, in those towns than in any others. And it is for this plain reason: because those who can barely afford the expense of tuition, will send their children to the academy, which the state or benevolent individuals have built up for their accommodation, and give themselves no further trouble about the free schools, but to pay the tax-bill for their support, when it is presented.

Thus the men, who would have the most interest in the subject, the most intelligence and the most leisure to conduct the concerns of the town schools, secede from them, and join themselves to other institutions. Abolish the academy and leave these six families of each town to the free schools alone, and you would find all their powers assiduously employed to put them in the best condition possible. Or rather put the free schools in a state to afford as good instruction as the academies now do, and you would supersede, in a great degree, the necessity of them. And it is apprehended that it would be quite easy to place them upon a footing to give even better instruction, at least in all the elementary branches of a common education, than the academies now give or ever have given.

In 1827, Mr. Carter presented a memorial to the legislature, praying for aid in the establishment of a seminary for the education of teachers, with a model school attached. The memorial was favorably reported on by a committee, of which the Hon. William B. Calhoun, of Springfield, Mass., was chairman, and a bill, making an appropriation, was lost by one vote in the senate. In that year, the town of Lancaster appropriated a portion of land, and the use of an academy building, to aid him in carrying out his plan as a private enterprise. He purchased several dwelling-houses, to accommodate his pupils and teachers with lodgings and board, hired assistants, who were to be taught by himself on his plan, and opened his school. Within a few months after his school opened, the people of Lancaster, who did not comprehend the full and ultimate public benefits of the new institution, began to manifest opposition, and threw such obstacles in his way, that he was obliged to abandon his project, as a public enterprise, after having embarrassed himself by his pecuniary outlays for buildings and teachers. He, however, continued to give instruction for many years afterward to private pupils, many of whom are now successful teachers in different parts of the Union.

In 1830, Mr. Carter assisted in the establishment of the American Institute of Instruction, of which he was for many years an officer and an active member. At its first session he delivered a lecture on "the necessity and most practicable means of raising the qualifications of teachers."

In 1835, and for several years afterward, he was a member of the legislature; for three years, of the house of representatives; and, in 1838-39, of the senate; and, in that position, as chairman of the

committee on education, drafted several able reports and bills, to promote the cause of educational improvement. During his first term, he secured the appropriation of three hundred dollars a year in aid of the objects of the American Institute of Instruction. In the same session he submitted an elaborate report in favor of "an act to provide for the better instruction of youth, employed in manufacturing establishments,"—which the Hon. Rufus Choate characterized as "a measure of large wisdom and expanded benevolence, which makes it practicable and safe for Massachusetts to grow rich by manufacture and by art." In 1836, as chairman of the same committee, he reported a bill for the appointment of a superintendent of common schools, and advocated the establishment of a seminary for the professional education of teachers.

In 1837, Mr. Carter made a vigorous effort in the house to secure the appropriation of one-half of the United States surplus revenue, for the education of common school teachers. His speech, on the second of February, for this object, is an able exposition of the claims of free schools for efficient and liberal legislation, and of the necessity of an institution devoted exclusively to the appropriate education of teachers for them. His amendment was lost; but he had the satisfaction, at a later period of the session, to draft the bill establishing the Board of Education, which was adopted.

Unfortunately for the cause of popular education, and his own permanent reputation as a teacher and educator, Mr. Carter was drawn away from his school and his study, to plunge into the noisy discussions of politics, and to become involved in the crash of financial speculations and disasters. By so doing he exposed his good name to the detraction and persecution of men whose enmity he had provoked by pecuniary losses and the too strenuous advocacy of temperance and other reformatory movements of the day. Great as were the services rendered to public schools by his pen and his voice,—by pamphlet and by legislation,—his pre-eminent practical talents might have achieved larger results in the organization and administration of schools of different grades, and his clear, vigorous, logical intellect might have poured floods of light over the whole field of education.

Mr. Carter was married, in May, 1827, to Miss Anne M. Packard, daughter of Rev. Asa Packard, formerly of Lancaster. He was a confiding, sympathizing husband, and his wife was entirely worthy of his confidence and love. To his only child, a daughter, he was at once father, brother, and teacher. Whatever were his own cares and burdens, they never made him forgetful of his family. He was the light and warmth of his home; no eclipse was ever visible there. Mr. Carter died at Chicago, on the 21st of July, 1849.



$y = 0$ $x = 0$ $W = 0.0417$ $\sigma_{\text{max}} = 1.0$ $\sigma_{\text{min}} = 0$ $\sigma_{\text{avg}} = 0.5$

Geo. B. Emerton -



James M. Clark

VII. GEORGE B. EMERSON.

GEORGE B. EMERSON, the first principal of the first English High School established in this country, and for more than thirty years the head of the best school for girls in Boston, Massachusetts, was born on the 12th of September, 1797, in what is now Kennebunk, York County, Maine, then a part of the town of Wells. His father was Samuel Emerson, M. D., a gentleman who, in the midst of his professional occupations, always took great interest in the schools of the town, and used his influence in sustaining them at a high point of excellence. Dr. Emerson was a good scholar, and retained through life his early fondness for the Latin and English classics, and his familiarity with them. His son, George B. Emerson, attended the schools of the town during the winter half of the year, but in the summer occupied himself busily, but not severely, with the health-giving labors of the farm and the garden. The advantages of such an early life, both mentally and physically, can hardly be overestimated. They were fully enjoyed by young Emerson, who then formed a habit of steady, vigorous labor, and a love of employment, which have never deserted him, and which, added to abilities of a high order, have enabled him to accomplish so much for the good of society. These early habits also inspired him with a love for botany and other branches of natural history, which has been of immense benefit to him as a teacher, a source of perpetual interest and exalting pleasure, and of healthy recreation. In 1812, he enjoyed, for six months, the instruction of Benjamin Allen, L. L. D., the able master of Dummer Academy, at Byfield, where he learned the elements of the Latin and Greek grammars very thoroughly. His remaining preparation for college was made at home, under the care of his father, and he entered Harvard University in 1813. In 1817, he took the degree of Bachelor of Arts.

The winter vacation at Cambridge, in those days, was seven weeks long. It is now six, and it was the usage then, as now, for young men, who desired to add something to their means of meeting college charges, to teach winter schools in the country, taking four or five weeks out of the term, and so lengthening the period of their absence to ten or twelve weeks. Mr. Emerson began the great task of his life by teaching, in the winter of 1813-14, a school in one of the districts

of his native town. During a part of the vacation of the following winter, he taught, as a substitute for another, a school in Saco, Maine. The members of this school were mostly the children of people employed in the saw-mills, on Saco river, at that time a rude, intemperate, and violent class of men. Mr. Emerson had an opportunity of seeing here the worst form of school-keeping; a form which, happily, can hardly be said to exist at the present day. It was considered manly to resist the lawful authority of the teacher, as this savage feeling was encouraged and applauded by the degraded parents. The previous winter, the master of the school had been seized by the larger boys—in those days appropriately designated the *Old Boys*—was dragged from the school-house, and made to ride upon a rail; the favorite mode, in that region and at that time, of celebrating a victory of insurgent pupils over their teacher. Mr. Emerson was then a tall, slender youth of seventeen; but he did not hesitate to run the hazards of accepting the office of master, and endeavoring to govern this unruly body of youths, many of whom were older than himself, and, like all such desperados, large, strongly built, and of powerful muscular development. The means to which he trusted for gaining the mastery over these rude and untaught spirits, were disinterestedness and purity of purpose, and that moral courage which, in the long run, always carries the day over brute force. Nor did he miscalculate the efficacy of these principles of school government. His influence over the school strengthened every day, but the labors and trials of his position were exhausting and severe—quite too much so for his age and physical powers. He was relieved, however, from them, before the school period terminated, by the accidental burning down of the ruinous building in which the school was kept.

The next winter, Mr. Emerson's health had suffered so much by overtaking his energies, and neglecting the laws of health—which few students in those days knew any thing about, and which were not taught in any department of the university—that he was unable to teach. He had passed many months without a reasonable amount of sleep, exercise, air, and recreation; and nature never permits her sacred laws to be disobeyed with impunity. He was paying the penalty which she invariably exacts.

In the winter of 1816-17, Mr. Emerson taught a school, for ten weeks, at Bolton, Mass. The moral tone and intellectual character of the people of this pleasant town were unusually high. This superiority was due, in no small measure, to the influence of the excellent Mr. Allen, for many years the minister of the town. Mr. Allen was one of the most honest and conscientious men that ever lived.

He was clear-headed and simple-hearted ; eminently kind and social in his feelings ; hospitable to the stranger, and ever welcome to young and old. He was naturally a humorist, and this natural tendency was, perhaps, increased by the circumstance that he remained unmarried. He was fond of the fields, and prided himself on the excellence of his orchard. The casual visitor at his house was sure of hearty welcome ; and a plate of the most tempting apples, with another of the delicious "dough-nuts" of Lucy, the old gentleman's excellent housekeeper, was invariably placed before him. Mr. Allen would have been a favorite of the Spectator. He was thoroughly devoted to his people's highest good, and they repaid him with a warmth of fervent affection, not always witnessed in the relation between parish and minister in these latter days. Among the objects of his constant care, none stood higher than the schools. He always attended the examinations, and took a formal part in putting questions to the scholars ; and his kindly countenance and genial manners, on these occasions, were delightful both to master and scholar. He was always on the side of the master who desired to do his duty, and from him the anxious and weary teacher received the kindest and wisest counsel, and the most efficient support. Under these circumstances, it is not surprising that the schools of Bolton were favorable specimens of New England common schools, nor that an unusually large proportion of the men and women educated in them, have proved to be useful and prominent members of society.

In the autumn of 1817, after leaving college, Mr. Emerson took charge of a small private academy, in Lancaster, Mass. His constitution, naturally good, and strengthened by the out-door employments of his early life, had been much broken by excessive and untimely study. His eyes were in such a condition that his physician forbade the use of them, except in cases of extreme necessity ; and his lungs and nervous system were seriously affected. The labors of the school were exhausting, and the number of the scholars increased rapidly from about twenty to over fifty, many of them being entirely under Mr. Emerson's charge, out of school as well as in. But he was surrounded by kind and intelligent friends ; the society of the place was cultivated and cordial ; and he received, from all quarters, that sympathy, co-operation, and support that are most cheering to the heart of the faithful teacher. His principles of discipline and government at that time, however, were widely at variance with those which further experience, and a profound insight into the human heart, led him afterward to adopt. He relied upon the strong arm, and the excitement of emulation by prizes, medals, and distinction, all of

which he subsequently rejected and but very seldom resorted to. Many teachers, still, would hesitate to adopt the system to which Mr. Emerson's moral judgment finally gave an unhesitating preference and approval. The question is not yet fully decided; but it may safely be asserted, that if all teachers had the intellectual accomplishments, and the weight of personal influence, which distinguish him pre-eminently, there would be no doubt left that the system which employs only lofty and disinterested motives in the training of the young, would infinitely exalt the style and spirit of education, both public and private.

In 1819, Mr. Emerson was invited to accept the office of tutor in the mathematical department of Harvard University, under the late Professor John Farrar, and he afterward performed, for a short time, the duties of Greek tutor. The leisure of a college tutorship, contrasted with the unintermitted labors of the preceding two years of teaching, seemed to Mr. Emerson like a long and pleasant vacation. He was associated with the ablest men in the literary class of that time. It was in the glorious academic days, when the good Dr. Kirkland had surrounded himself with a brilliant circle of professors. The genial and gracious Farrar lectured with the most attractive eloquence on physics and astronomy; Everett, in the early flush of his manly genius, and his vast learning, expounded the beauties and splendors of Greek literature, and gave rich promise of what he was destined to become; the elegant, accomplished, conscientious Frisbie, who had taught the Latin language and literature, with the enthusiasm of genuine scholarship, now devoted himself with equal ardor to the department of moral philosophy and natural theology; these eminent men, and others scarcely less distinguished, made the academic society, to which Mr. Emerson was now admitted, brilliant, exciting, and instructive in the highest degree. No wonder that his mind received a strong impulse, and that his tastes for elegant letters and a life of devotion to intellectual pursuits were confirmed.

Mr. Emerson now had the opportunity he desired of reviewing the experience of the previous years, and re-examining the principles upon which influence and discipline, in the working of a high system of education, should be grounded; and our young tutor, now only two and twenty years of age, came to the conclusion, that the use of the ferule or the rod in school, except in extreme cases of obstinate resistance to authority, should never be resorted to; that only ignorance, or stupidity, or insensibility, proved the use of such a coarse and degrading method of government habitually necessary; and that the excitement of emulation, though sanctioned by the authority of

Cicero and Quintillian, is contrary to some of the clearest principles of the Gospel, and he resolved should an opportunity occur, in his future career as a teacher, to appeal, in the discipline of a school, to a different and higher set of motives than those which were universally resorted to.

In 1821, the desired opportunity presented itself. The English High School for boys, then called the English Classical School, was established that year by the town of Boston, for the purpose of furnishing a better intellectual preparation for the duties of life to the youth of the town who were not intended for a college course. Of this school, Mr. Emerson was chosen principal, with authority to determine the course and methods of instruction and discipline; and he soon satisfied himself that the sentiment of honor, to which he appealed, was not only in itself a higher motive of conduct, but that it was, just in that proportion, a more effective means of influence with the boys than the fear of punishment. He endeavored to check, so far as he could, the feeling of emulation; believing that it is always strong enough without artificial excitement; and he addressed himself to the conscience and the principle of duty, the desire of making a good preparation for the duties of life, and the pleasure of acquiring knowledge and of exercising the intellectual faculties.

While Mr. Emerson was connected with the High or Classical School, he had the good fortune to assist in bringing to perfection, and producing before the world, the most valuable school-book which has appeared in our age—the Mental Arithmetic of his friend, the late Warren Colburn. Mr. Colburn, as he prepared the book, submitted it daily, lesson by lesson, to the test of practice in a private school for boys, which he was then teaching. He proposed to Mr. Emerson to send him the manuscript as it was written, and that the lessons should be given to the classes in Mr. Emerson's school, the pupils of which were more numerous and advanced than his own. The "*First Lessons*" were thus submitted, lesson by lesson, by another teacher, to the same test which he was himself applying. Very few changes were suggested, beyond a little amplification in some of the sections. The whole admirable work existed complete in the mind of the author. It had grown out of his thoughts, and was perfected by his experiments. But it was a great advantage to Mr. Colburn to have the hearty co-operation and the practical judgment of so able a teacher as Mr. Emerson, and one so earnestly engaged in making improvements in the methods of education; and the first public exhibition of its effect upon the powers of the learner was indeed a grateful triumph to the modest and ingenious author.

In 1823, Mr. Emerson gave up the Classical School, with great reluctance, and opened a strictly private school for girls. The result showed, however, the wisdom of the change. A most interesting and important field of labor was opened, and the excellent influence of this admirable school, in enlarging and elevating the system of female education, has long been felt, and its effects will never cease, in the character of the society of Boston, and the wide extent of the social relations of the capital. Mr. Emerson, while deliberating upon the questions that had been pressed upon him, consulted a dignified and excellent lady, Mrs. Eliot, who had always taken a warm interest in his career. Without hesitation, she advised him to become a teacher of girls, and "to do all in his power to show them how to go there"—pointing up toward Heaven; and this advice, thus strikingly enforced, had great influence in determining Mr. Emerson's course. In the spirit of this christian counsel, Mr. Emerson always addressed his pupils as immortal beings, preparing for life in this world, and a higher life to come, and grounded his authority as a teacher upon the authority of Jesus Christ. His constant aim was, first of all, to fill the heart of the pupils with reverence for the laws of God, whether revealed in the Scriptures or discovered by reason; next, to form habits of *self-control*, punctuality, and order, and to establish a profound sense of accountability to God for the proper use of all the talents with which He had been pleased to endow them. Again, he led them to cultivate the kindly feelings, and those courteous manners, which belong to the character of the high-bred gentlewoman. He aimed to make them good scholars, not so much for the sake of scholarship, strictly so called, as for the effects of literary culture upon the taste, the refinement, and the elevation of the mind and character of woman. As to the subjects taught, it was the earnest purpose of Mr. Emerson to fill the minds of his pupils with that kind of knowledge which should enable them to perform, nobly, all the duties to which a woman may be called—the duties of her social position, the duties that devolve upon her as wife and mother, and which relate to the physical, mental, and spiritual nature of those intrusted to her forming care—not neglecting such studies as should supply her with resources for pure and elevated enjoyment in solitude. Such were the lofty aims and motives with which Mr. Emerson entered upon the great and sacred task which lay before him in his new career. The community is now reaping the rich fruits of his long, conscientious, and most successful devotion to this exalted duty—the great labor of his life. He continued in the work until 1855—a period of more than a quarter of a century, during every year of which

more pupils were offered him, on his own terms, than he could receive.

Besides his direct labors as a teacher, Mr. Emerson's talents have been devoted to other, but kindred objects, with remarkable efficiency. In 1827 the Mechanic's Institution was formed for the purpose of exciting a taste for science, as connected with the mechanic arts, and of elevating the tone of thought and inquiry among the young men in that city. Dr. Nathaniel Bowditch was first president of the society, and Mr. Emerson was first corresponding secretary, and was chosen to give the opening address. No lectures were given during the first year. In the second, Daniel Webster gave the introductory discourse, and Mr. Emerson gave the first course of lectures; six lectures upon elementary mechanics. So great was the favor with which this first attempt to give popular and scientific instruction by means of lectures was received, that no hall could be found large enough to contain the persons who applied for tickets, and the introductory discourse and all the lectures of this winter were repeated to crowded audiences. Mr. Emerson was afterward often invited to deliver these lectures, or others, before the lyceums of the neighboring towns. But he felt that all his time was no more than sufficient to prepare for the instruction to be given in his own school, and he uniformly declined the invitations.

In 1830, the American Institute of Instruction was formed by teachers and friends of education. Mr. Emerson took an active part in its formation and in all its operations, was its first secretary, and afterward, for many years, its president. The meetings of the Institute were held wherever it was thought they would have the best effect, or where the most urgent invitations were given by the inhabitants. At these meetings, the condition of the common schools, as well as of all others, was a constant subject of consideration; and, in 1836, a memorial was presented to the Legislature of Massachusetts, drawn up by Mr. Emerson, as chairman of a committee appointed for that purpose. The object of the memorial was to urge the importance of doing something by legislation for the improvement of the common schools, especially by raising the qualifications of the teachers; but apparently no effect was produced at the moment. It was referred to a committee, but no action was taken upon it. In 1837, another memorial, also written by Mr. Emerson, was presented to the legislature, in which the important measure of creating a superintendent of the common schools was strongly urged, and modes by which such an officer might exercise a beneficial influence were pointed out.

These repeated memorials to the legislature, and other causes then

at work in the commonwealth, fixed the public attention upon the subject, and led to the establishment of the Board of Education, of which the Hon. Horace Mann, then president of the senate, was the first secretary. The influence of the Board, and the efficient labors of Mr. Mann, and of his successors, are fully appreciated by an enlightened public sentiment. Of the other causes above alluded to, one of the most powerful was, undoubtedly, the appearance of a series of letters upon the schools of Massachusetts, by the late Hon. James G. Carter. These letters were extensively circulated and read; they were republished in the British Provinces, where, as well as at home, they made a profound impression. Other causes, co-operating toward the same result, were the publications of Rev. T. H. Gallaudet and W. C. Woodbridge, the labors of Rev. S. R. Hall, the lectures of the Rev. Charles Brooks, and the discussions which had taken place, from year to year, in the Institute of Instruction.

In 1831, Mr. Emerson delivered before the Institute a lecture on Female Education; and, in 1842, one on Moral Education. In 1843, he wrote the Second Part of the "School and the Schoolmaster"—the Rev. Dr. Potter writing the First. This work was written on the invitation of the late James Wadsworth, of Geneseo, N. Y., one of the most enlightened friends of universal education, who paid the expense of printing and distributing an edition of fifteen thousand copies. An act of kindred munificence in the late Hon. Martin Brimmer, of Boston, who married a daughter of Mr. Wadsworth, placed a copy of this work in each of the district schools in Massachusetts.

From the first establishment of the Normal Schools in Massachusetts, Mr. Emerson took the greatest interest in their success, and was a frequent visitor. In 1848, he was appointed a member of the Board of Education, and continued to be a most active and useful officer in that position, until he closed his own school, and left the United States for a tour in Europe, in 1855. For two years, 1847 and 1848, Mr. Emerson allowed himself to be chosen upon the Boston School Committee. During these years he gave much time to the examination of the schools, and made strenuous efforts to have the medals for girls, abolished. After deliberate consideration, and full discussion, the committee voted to discontinue these medals. This success was, however, only for a time. The measure was defeated, and the medals restored through the management of an individual who took pains to go round to the members of the committee, previous to the meeting at which the vote was to be taken, and persuade them to promise either to stay away or to vote for the restoration of the

medals. On his way to the meeting Mr. Emerson met one of the committee coming away. On being questioned, the gentleman confessed that his remaining would be of no use, as he had promised, if he voted at all, to vote for the medals. On entering the meeting, Mr. Emerson was surprised to find most of his friends absent. A vote was immediately passed which precluded all discussion upon the question, and Mr. Emerson was defeated, without being allowed to say one word in defense of his measure. This was a serious disappointment to Mr. Emerson, as he had long thought that there was little propriety in urging preparation for the sacred duties of a mother, and the formation of the quiet, disinterested, and self-sacrificing character, which is to gladden, enlighten, and bless a Christian home, by the spirit of rivalry and the love of distinction, which are fostered by medals.

In 1830, the Boston Society of Natural History was formed. Mr. Emerson was one of a few gentlemen who were accustomed to meet at the study of Dr. Walter Channing, and who at length obtained from the legislature an act of incorporation, and thus were the founders of the society. Of this society, which has grown up to be one of the most important scientific institutions of Boston, Mr. Emerson was, for many years, the president. During this period, the Botanical and Zoölogical Survey of Massachusetts was recommended by the society as a proper complement to the Geological Survey, which had been made by Prof. Hitchcock. Mr. Emerson was made chairman of the commission, appointed by Governor Everett, to conduct the survey; and, in fulfillment of the duty with which he was charged, he carried the reports of those associated with him through the press, and, in 1837, made his report upon the trees and shrubs of Massachusetts. This was the first of the state surveys. Mr. Emerson's volume is not only of great practical utility to the material interests of Massachusetts, but is written with such abundant and minute knowledge of the subject, and such beauty of style, that it has become a classic in scientific literature.

While a member of the Board of Education, Mr. Emerson suggested and drew up the act of the legislature, which originated the State Scholarships, and recommended the useful measure of granting the aid of the state to the pupils attending the normal schools. In 1819, he was the secretary of the Cambridge branch of the Phi Beta Kappa Society. He was early elected a member of the American Academy of Arts and Sciences, and for several years was its corresponding secretary.

To a mind of such liberal culture and large experience, a visit to

Europe could not fail to be the source of lasting interest and the greatest delight. But, though Mr. Emerson had fairly entitled himself, by the unremitting and various labors of so many years, to whatever of respite and amusement such a visit affords to the traveler, he neglected no opportunity of gaining information upon the subjects connected with education in the Old World, and of pursuing his favorite sciences, and the branches of elegant literature, to which his leisure time—if his time could ever be characterized by that term—had always been consecrated. In Germany, he visited and carefully examined the normal schools and the gymnasia; and scrutinized the processes of teaching, and the branches taught, from the very beginning to the end of the course. In Rome, which he reached in January, 1856, he immediately began to study the plants which were in bloom among the ruins of the Colosseum, and of the palaces of the Cæsars, and over the Campagna, in every direction from the Eternal City. He continued this fascinating occupation until the latter part of April, when he left Rome for Naples. Here he renewed his pursuits in the Botanic Garden, on Vesuvius, and the old volcanic mountains, which give such a striking character to these classic regions. He kept up with the vegetation, as he returned to Rome, and until he left that city, verifying every plant which came into flower in Cicero's villa, and Horace's farm, and ancient Veii, and wherever else he went. He was assisted in these beautiful investigations by an excellent English botanist at Rome, and by Prof. Rolfe, attached to the Pope's Botanic Garden. At Naples he was kindly assisted by the venerable Prof. Tenore; and, as he traveled back from Naples to Rome, he kept his carriage filled with plants freshly gathered all along the road, and his herbarium contains specimens from every famous spot along that route, so peopled with the most interesting historical, and classical associations. On his return to Rome, in May, he resumed his investigations; but Nature had been so rapid that it was impossible to examine all the plants. On a leisurely journey from Rome to Florence, he visited the Botanical Gardens in several of the old Etruscan towns, and greatly astonished the gardeners, to whom he was introduced as an American, by speaking Italian, and discoursing upon the natural orders and their characteristic genera.

Mr. Emerson did not neglect the classical and historical objects of interest, in every part of Italy, and the wonderful treasures of art. He explored the Roman Catacombs, and visited the sites of many of the old Latin cities, and studied their ruins with the appreciating eye of the well-trained scholar.

VIII. JOHN LOWELL.*

JOHN LOWELL, the founder of the Lowell Lectures in Boston, Mass., was born in that city on the 11th of May, 1799. He was the son of Francis C. Lowell, to whom, more than to any other individual, is New England indebted for the permanent establishment of the cotton manufacture in this country. After receiving his earliest education at the schools of his native city, he was taken by his father to Europe, in 1809, and placed at the high school of Edinburgh, where he remained till 1813, when he was placed in Harvard College. He had always been remarked for an inquisitive turn of mind, and for the eagerness with which he sought to inform himself, both by conversation and books. He might be said, with truth, to have inherited a thirst for knowledge. His favorite reading was voyages and travels; and, at this early period of his life, he was more thoroughly acquainted with geography than most men of finished education. His health did not permit him to complete his collegiate course, and, after two years' residence at Cambridge, he left the university to follow a more active course of life. In 1816 and 1817, he made two voyages to India; the first to Batavia, returning by Holland and England, the second to Calcutta.

His readiness to engage, in his youth, in these distant voyages, without the inducement of necessity, may, no doubt, be considered as an early indication of that passion for foreign travel which afterward disclosed itself in his character, and which was, unquestionably, stimulated by this glimpse of the remote East. Although circumstances did not permit him for a long time to gratify his taste in this respect, there is reason to believe that he cherished, from a very early period, the hope of adding something to the stock of modern discovery. Among his earliest arrangements of business, there are traces of a plan of a voyage to Africa, and of attempts to explore the mysteries of the geography of that continent, which have hitherto resisted the enterprise, the courage, and the self-devotion of so many intelligent and unfortunate travelers.

From the time of his return from his second voyage, with invigorated health, Mr. Lowell became a diligent student. He was engaged

* A memoir, delivered on the 31st of Dec., 1839, as the introduction to the Lectures on his foundation. By Edward Everett.

with success in commercial pursuits, and, of course, gave to them a sufficient degree of attention. His operations, however, were principally connected with the East Indies, and did not engross his time. His leisure was almost exclusively devoted to reading. He spared no time for the frivolous pleasures of youth; less, perhaps, than his health required for its innocent relaxations, and for exercise. Few subjects in science or literature escaped his attention; and an uncommonly retentive memory rendered available, for future use, the knowledge which he was so diligent in acquiring. He rapidly formed one of the best selected and most expensive private libraries in the city, and acquired a familiarity with its contents, not always possessed by the owner of many books.

He did not, however, allow his love of reading to divert his thoughts from the political and moral interests of the community. His time and his property were freely given to the calls of public and private benevolence. He engaged with earnestness in the promotion of the various public-spirited undertakings of the day. He took an active part in political concerns. Regarding our institutions of government as better adapted than any others to promote the virtue and happiness of the people, he considered it the duty of every good citizen to bear his part of the burden of sustaining and administering them. Engaged in lucrative pursuits, which made much attention to public business a pecuniary sacrifice, and with a thirst for knowledge which superseded the necessity of political excitement, he yet gave himself, on principle, to the public service. He was repeatedly a member of the common council of the city, and the legislature of the commonwealth. In both of these bodies he was distinguished for his assiduous attention to his duties, and for the practical and business-like view which he took of every subject of discussion. Indeed, it was his characteristic to do *thoroughly* whatever he undertook. His usefulness was, however, more conspicuous in the committee-room than at the caucus; and, as he did *not* depend upon office for bread, he dwelt less than is the fashion of the day in professions of disinterested regard for the people. Leaving others to flatter them, his own conscience was satisfied when he had served them to the best of his ability. He was a philosophical student of the genius of our political systems, and passed the autumn of the year 1829 at Richmond, for the purpose of attending the debates of the convention assembled in that city to revise the constitution of Virginia.

In the years 1830 and 1831, he had the misfortune to lose, in the course of a few months, his wife and two daughters, his only children. This calamity broke up, for a season, all his pleasant associations with

home, and served to revive the slumbering passion for foreign travel, of which we have seen the early indications. Desirous of extending his acquaintance with his own country before going abroad, he passed a considerable portion of the summer of 1832 in a tour in the Western States. He made other preparations, of a more serious character, for what might befall him abroad, and, as the event proved, with a spirit foreboding that early termination of his life which Providence had appointed. Bereaved, by the domestic calamity just alluded to, of all those dependent upon him for their support and establishment in life, he had already conceived and matured the plan of his munificent foundation. By a will, made before leaving his native country, he set aside a large portion of his ample property to be expended, forever, in the support of courses of free public lectures in the city of Boston.

Although the plan of his travels abroad was not, probably, at this time settled, there is evidence that he contemplated a long absence, and a very extensive tour. He, no doubt, proposed to himself, on leaving home, to penetrate the eastern continent as far as practicable. He mentions, in some of his early letters, his purpose, if possible, to enter the Chinese empire by the Indian frontier. Alluding to the distant prospect of his return home, he uses the striking expression, "I must first see the circle of the earth." More than once he intimates the design of passing from the east of Asia to the Polynesian Archipelago.

With these vast projects revolving in his mind; with feelings not alienated from home, but seeking relief from its sorrows in the excitement of travel; with an almost unlimited command of the means of gratifying his curiosity; with a mind well fitted for instructive observation, by the possession of a large amount of various knowledge; with those moral qualities of industry, perseverance, and courage, which are required for advantageous travel in barbarous countries; with that elevation of spirit which is produced by a consciousness that he had made provision for great objects of public utility, to take effect should any disaster befall himself; he sailed for Europe, in November, 1832, never to return. The following winter and spring were passed in Paris, and the summer and autumn of 1833 in England, Scotland, and Ireland.

Early in December, 1833, he again passed over to the continent, taking the route of Holland and Belgium to Paris. His projects for the future course of his travels, as far as they were digested at that time, may be gathered from a letter to the *chargé d'affaires* of the United States at London, of the 19th December, 1833, in reply to a letter of inquiry from that gentleman. He says:—

I leave Paris in five or six days, and proceed rapidly through France, Italy, and Sicily, residing a few days at some of the principal towns. I expect to reach Malta by the beginning or middle of April. From Malta we shall endeavor to make a short visit to the Pyramids, by the way of Alexandria and Cairo, and from thence to go to Jerusalem, by the way of the Desert of Suez. Taking shipping at some port in Syria, or Palestine, we shall follow the coast to Smyrna. Should this route be inexpedient, on account of want of time, fear of the plague, or political disturbance, we shall visit Greece before proceeding to Smyrna. From the last named place we shall proceed to Constantinople, where we intend to arrive as early as the middle of July, or first of August; because it would be very disagreeable to be overtaken by cold weather in the mountainous regions of Armenia, Koordistan, or Georgia. In August, we shall proceed from Constantinople to Trebizond, on the Black Sea, probably by water. From Trebizond we shall start on horseback, and, placing our baggage on mules, follow for a time nearly the route of the ten thousand Greeks under Xenophon, and rest a short time at Teflis, the capital of Georgia. We shall leave Teflis as soon as possible, and stop next at Teheran, the capital of Persia. Here I propose to pass two or three months, both because, in all probability, the season will be unfavorable for traveling, and because I should like to obtain a slight knowledge of the Persian language. From Teheran, we shall cross Persia, passing through Ispahan, the ruins of Persepolis, and Shiraz,—the city of gardens,—and Busheer on the Persian Gulf. Thence I take shipping for Bombay.

After a few days passed in Paris, and an excursion to the southwestern portion of France, he proceeded to Italy, by the way of Nice and Genoa, and, having visited the principal cities in Lombardy, arrived in Florence in the early part of February, 1834. The charms of the climate, the beautiful remains of antiquity, and the wonders of modern art which have been produced by their contemplation, the all-pervading interest of the classic soil of Italy, with the attractions of society, to which he found access on the most advantageous footing, detained him in the various cities of Italy beyond his calculation. While in Florence, he gratified his taste for the fine arts, by engaging our accomplished fellow-citizen, Greenough, to execute a statue for him, on one of the most graceful subjects of classic mythology, to be presented to the Boston Athenæum. At Rome, he made an agreement with a Swiss artist, highly recommended to him by Horace Vernet, as an excellent draftsman and painter, to accompany him, for the purpose of taking sketches and designs of scenery, ruins, and costumes, throughout the whole of his tour. A considerable number of drawings, executed by this artist, have been received in this country since Mr. Lowell's decease.

Having completed the examination of the objects of interest in the vicinity of Naples, and visited the beautiful ruins at Pæstum, Mr. Lowell crossed to Palermo. Although within the pale of Europe, some of the peculiar hardships of Oriental traveling commence in the Island of Sicily. Except in the immediate neighborhood of large towns, there are no roads nor public conveyances, and no houses for the reception of travelers. But circumstances like these do but give a zest to travel. Mr. Lowell devoted a month to a tour of the island.

He explored the majestic ruins of Agrigentum and Selinus,—perhaps the most imposing monuments of classical antiquity,—visited Syracuse and Catania, and ascended the middle region of *Ætna*. Nor was his attention confined to the wonderful remains of ancient art; he surveyed the countries he visited with the eye of a naturalist. In a letter of the 8th June, 1834, to the Princess Galitzin, (the amiable and accomplished granddaughter of the celebrated Marshal Suwarow,) whose acquaintance he had formed at Florence, he thus expresses himself on the subject of the tour, which he had just accomplished in this interesting region:—"Clear and beautiful are the skies in Sicily, and there is a warmth of tint about the sunsets unrivaled even in Italy. It resembles what one finds under the tropics; and so does the vegetation. It is rich and luxuriant. The palm begins to appear; the palmetto, the aloe, and the cactus, adorn every roadside; the superb oleander bathes its roots in almost every brook; the pomegranate, and a large species of convolvulus are every where seen. In short, the variety of flowers is greater than that of the prairies in the Western States of America, though I think their number is less. Our *Rudbeckia* is, I think, more beautiful than the *chrysanthemum coronarium* which you see all over Sicily; but there are the orange and the lemon."

After a month passed in Sicily, Mr. Lowell crossed to Malta. Here he had so far altered the original plan of his route, that he determined to make the tour of Greece before visiting Asia Minor. Accordingly, after devoting a few days to this celebrated rock, he embarked in a Greek vessel for Corfu, and arrived in that island, after a tedious passage of fifteen days. When the traveler from Western Europe or America finds himself sailing along the channel which separates the Ionian Islands from the shores of continental Greece, he feels himself, at length, arrived in "the bright clime of battle and of song." In Italy and Sicily, he is still in the modern and the Western World, although numberless memorials of the past remain, and a foretaste of Eastern costume and manners presents itself. But he realizes, with full consciousness, that he is indeed on his pilgrimage, when his eyes rest upon those gems of the deep, which the skill of the Grecian minstrel has touched with a spark of immortality,—when he can say to himself, as he passes along,—“On this spot was unfolded the gorgeous web of the *Odyssey*; from that cliff *Sappho* threw herself into the sea; on my left hand lay the gardens of *Alcinoüs*; and the olive, and the grape, and the orange, still cover the soil; before me rises the embattled citadel which *Virgil* describes; on my right are the infamous *Acroceraunian* rocks of *Horace*; and within that

blue, mountain barrier, which bounds the horizon, were concealed the mystic grove and oracle of Dodona,—the cradle of the mythology of Greece." When to these recollections of antiquity are added the modern Oriental features of the scene;—the dress of the Grecian peasant or boatman, seen as you coast along the islands; the report of the musket of the Albanian,—half shepherd, half bandit—as he tends his flocks on the hill-sides of the main land; the minaret, the crescent, and the cypress grove, which mark the cities of the living, and the resting-place of the dead;—you then feel yourself departed from the language, the manners, and the faith of Christendom, and fairly entered within the vestibule of the mysterious East.

After passing a few days at Corfu, the capital of the Ionian Islands, Mr. Lowell crossed the narrow strait which separates it from the shores of Albania, and went up to Yanina, the residence of the late celebrated Ali Pacha. The beautiful little city of Yanina,—which, in 1819, lay quietly nestled upon a promontory extending into a lake of moderate compass, half surrounded by the neighboring heights of Pindus, and under the protection of its stern master, exhibiting for a Turkish town an unwonted air of prosperity,—was seen by Mr. Lowell just emerging from a destructive war, which had ended with the life of the aged despot. Having passed a few days here and in the neighborhood, he pursued his tour southward, through the passes of the Suliote Mountains, apparently by the route which is rendered so familiar to us by the second canto of *Childe Harold*. A part of this region has acquired a melancholy interest, as the theater of the exploits and fall of Marco Bozzaris, and other mournful scenes of the Greek revolution. Visiting Missolonghi,—where he became acquainted with the remaining members of the family of Bozzaris,—Patras, the Gulf of Lepanto, the citadel of Corinth, Mycene, Argos, Napoli di Romania, Epidaurus, and the Island of *Ægina*, he arrived, about the 10th of July, at Athens;* "That venerable, ruined, dirty, little town," I use his own words, "of which the streets are most narrow and nearly impassable, but the poor remains of whose ancient taste in the arts exceed in beauty every thing I have yet seen in either Italy, Sicily, or any other portion of Greece."

But, notwithstanding his keen relish for the beauties of ancient art, it was no part of his design to make an extensive Grecian tour. In the first week of September, he took passage for the Island of Syra, which, since the downfall of the Turkish dominion in Greece, has become the emporium of the Archipelago.

After having been detained a considerable time at Syra, by want

* Athens has since been greatly and permanently improved.

of a wind, Mr. Lowell took passage for Smyrna, where he arrived on the 24th September, 1834. He had now reached the region which preceded even classic Greece in the march of civilization,—the shores of that Ionia wheré Homer lived and sung, before the light of poetry dawned on Athens. Nor are classic associations its only interest. It abounds in names that stand prominent on the mysterious page of the Apocalypse. In a letter to a friend in America, dated October 20th, he observes: "The rich and, in spite of Turkish oppression, well-cultivated valley of the Meander, adorned with cypresses and olive trees, and filled with fig trees and vineyards, is worthy of being compared to the broad interval lands of an American river. It resembles, in size and fertility, the Mohawk, and is the second largest river in Asia Minor, the Halys being the first. Near its banks are the ruins of Magnesia, Tralles, Nysa, Laodicea, Tripolis, and, above all, Hierapolis, all of which I visited. I had previously been to Ephesus and Neapolis, or Scala Nova, one of the large commercial towns of the country. I then crossed Mount Messogis in the rain, and descended into the basin of the River Hermus, visited Philadelphia, the picturesque site of Sardis, with its inaccessible citadel, and two solitary but beautiful Ionic columns; and, in addition to what is sometimes called the house of Croesus, I crossed and drank of the waters of the Pactolus, forded the Hermus by the help of a Toorkman girl and a Greek boy, went to Thyatira and Magnesia *ad Sipylum*, and crossed the steep pass of the Sipylus into the smiling plain of Smyrna."

On the 9th of December, he sailed from Smyrna in a Greek brig, the Bellerophon, chartered by himself for the conveyance of his party and baggage. He coasted along the islands of Mitylene, Samos, Patmos, and Rhodes, making some stop at the latter island, and, after a voyage of eighteen days, arrived at Alexandria. From the moment the traveler sets his foot upon the soil of Egypt, he meets those remains of antiquity which carry him back to a period that precedes the dates of authentic history. The obelisk, which bears the idle name of Cleopatra's Needle, is in sight as he lands. As he moves up the river, broken remnant of elder days, fragments of Norman, Saracenic, Roman, Grecian, and, lastly, Egyptian architecture, tell the tale of the political vicissitudes of this ill-fated region; and when he reaches at length the great pyramids of Memphis, he feels himself in the actual presence of those mysterious dynasties,—which are at once forgotten and immortalized by imperishable monuments,—the ashes of whose sovereigns are laid up in mausoleums that will stand till the earth shall pass away,—whose names and titles are inscribed on

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obelisks and the walls of temples, from which three thousand years have not obliterated them, in characters whose import has even been deciphered by modern sagacity, but of whose shadowy annals we still strive in vain to catch the clue.

After a short sojourn at Cairo, Mr. Lowell commenced the ascent of the Nile. He had found the temptation to visit Thebes too strong to be resisted. The universal mode of traveling in Egypt is in long, narrow boats, with cabins and awnings, propelled by very large sails when the wind is favorable, and poled or drawn along by hand when it fails or is adverse. In a boat of this description, at his own disposal, (being the same which had shortly before been used by Marshal Marmont,) Mr. Lowell was able to regulate his progress, with sole reference to the objects of interest by the way. It happened that Mohammed Ali, the celebrated sovereign of the country, was ascending the Nile at the same time. He was overtaken by Mr. Lowell on the 18th of February, and granted him a long private audience in his tent. His inquiries showed uncommon intelligence and vigor of mind. He sought minute information as to the military and commercial marine of the United States, and particularly as to the extent of steam navigation upon our large rivers. Having inquired in what direction Mr. Lowell proposed to pursue his journey to India, he dissuaded him from attempting to traverse Syria, on the ground of the unsettled and dangerous state of the country. He advised him to adopt the route of the Red Sea and Mocha, and tendered him his protection up to that point.

Shortly after this interview, the prosperous course of Mr. Lowell's tour, hitherto unbroken by any adverse circumstance, received an alarming check. In consequence of exposure to the evening air, and the general effect of the climate, he was severely attacked by intermittent fever. The disease yielded, at first, to the remedies with which he was provided; and, on his arrival at Thebes, he was able to explore a portion of those stupendous ruins, at all times of extreme interest, and rendered doubly curious by the discoveries of M. Champollion. Establishing his abode on the ruins of a palace at Luxor, he surveyed and examined, as far as the state of his health would permit, the remains of those wonderful structures, on which the names, the wars, and the triumphs of a long succession of Pharaohs are recorded. Unfortunately, his recovery had been imperfect,—the season was advancing,—new exposures brought on a return of his fever, soon complicated with other complaints incident to the climate and region.

The state of his health appears to have awakened serious appre-

hensions in his mind. The first moment of convalescence was devoted to the completion of his last will, and to the formal statement of the principles on which he wished the important trust created by him to be administered,—provisions in which a great and liberal spirit, bowed down with sickness, in a foreign and a barbarous land, expressed some of its last aspirations for the welfare of his native city.

While detained by sickness at Thebes, he employed his attendants in making a collection of antiquities; and he succeeded in possessing himself of as large an amount and variety of these objects as have, probably, at any time been acquired by an American. They consist of fragments of sculpture in granite, basalt, and alabaster, some of them with hieroglyphical inscriptions; two or three papyrus rolls; bronze figures; mummies; and a multitude of utensils and other articles, illustrating the superstitions, arts, and manners of the Egyptians.

From Thebes, Mr. Lowell visited Upper Nubia, the primitive cradle of the somber civilization which, descending the Nile, rather overshadowed the enlightened Egypt. While at Syout, making his preparation, he witnessed the arrival of the great caravan of Darfour, in Central Africa, which had been two or three months in crossing the desert. He penetrated into Ethiopia as far as Khartoom, in the latitude of 15 degrees. From this point he returned to Berber, crossed the desert of Nubia to Sowākeen, on the western coast of the Red Sea. Here he embarked in a small vessel, navigated by Arabs, on the 16th of December, 1835, for Mocha, which he reached after great fatigue and exposure from being shipwrecked on the island of Dassa. From Mocha, he took passage in a British steamer for Bombay, which he reached on the 10th of February. Here, after struggling with his disease, he died on the 4th of March, 1836.

An immense degree of energy and perseverance were the prominent traits in the character of Mr. Lowell. Nothing less than an eminent degree of these qualities would have enabled him to pursue his journey into Upper Nubia, in a state of health which would have been deemed by most persons to require the care and comforts of home. He not only persevered, under these circumstances, in continuing his journey far within the tropics, in midsummer, but explored the natural features of the country through which he passed, and the remains of antiquity visited by the way, and recorded the result of his observations with a minuteness which would be thought highly creditable to the diligence of a person in perfect health.

A modesty bordering upon diffidence gave to his manners, in general society, an appearance of coldness and reserve, which might lead the

stranger to mistake his real character, in which there was a mixture of great strength and delicacy of feeling. The kindness of his disposition, and the warmth of his heart, shone out in the circle of his familiar friends, and diffused a genial influence on all around him.

The purity and delicacy of his moral principles were wholly unimpaired by his large intercourse with the world. Exposed, in youth, to the worst examples, on ship-board, and in foreign countries, he escaped unhurt, and carried forward into life the innocence of childhood. To a rigid and punctilious sense of justice, and a veneration for truth, he added that lofty sense of honor which is necessary to the moral heroism of character.

He was a firm believer of the great truths of natural and revealed religion. The sense of an overruling and directing Providence was never absent from his thoughts, and is frequently expressed in his letters. The Scriptures were the companions of his travels; and, by the specific directions given for his foundation, a course of lectures upon the evidences of Christianity was provided for.

His range of general reading was extensive, and his attainments above the common standard of scholarship. They were greatly extended, on his travels, by a diligent study of the languages of the several countries through which he passed, including the modern Greek and vulgar Arabic. He also devoted himself to the study of mineralogy, while passing some time at Edinburgh, in the summer of 1833. His observations of the barometer, of the thermometer, of the hygrometer, and of the course of the winds, are recorded with great precision, and evince familiarity with philosophical instruments. Barometrical estimates are made of the height of the various positions on his travels, where such calculations would be of interest. The state of agriculture, commerce, and particularly manufactures, seems every where to have received much of his attention; and valuable information on these subjects is contained in his Journal. He appears to have inherited a talent and taste for mathematics. Calculations, of considerable extent and intricacy, but in an incomplete and fragmentary state, apparently designed to ascertain the cubical content of the larger pyramids, are found among his notes. It is to be remembered, however, that he did not live to enter the field which was the great object of his undertaking. It is probable that large stores of knowledge, gathered up in a singularly retentive memory, were lost at his decease, without leaving a trace in the note-books of his journeyings, for the reason that he was arrested by the last summons, before he had set foot upon the region, in reference to which his reading had been for a long time directed.

THE LOWELL LECTURES.

With his first serious illness in Upper Egypt, (February, 1835,) Mr. Lowell turned his thoughts to the land of his birth, and the completion of his testamentary provision for the benefit of his native city. The object of his bequest, as set forth in his will, is "the maintenance and support of public lectures, to be delivered in Boston, upon philosophy, natural history, the arts and sciences, or any of them, as the trustee shall, from time to time, deem expedient for the promotion of the moral, and intellectual, and physical instruction or education of the citizens of Boston." After a partial recovery from a severe attack of disease, from which he suffered for five weeks,—in a codicil to his will, written amidst the ruins of Thebes, from a place called Luxor, an Arab village, the whole of which is situated on the remains of an ancient palace,—Mr. Lowell transmits to his kinsman and trustee, (John Amory Lowell,) his detailed directions for the administration of his trust. Of these, the most important are expressed as follows:—

As the most certain and the most important part of true philosophy appears to me to be that which shows the connection between God's revelations and the knowledge of good and evil implanted by him in our nature, I wish a course of lectures to be given on natural religion, showing its conformity to that of our Saviour.

For the more perfect demonstration of the truth of those moral and religious precepts, by which alone, as I believe, men can be secure of happiness in this world and that to come, I wish a course of lectures to be delivered on the historical and internal evidences in favor of Christianity. I wish all disputed points of faith and ceremony to be avoided, and the attention of the lecturers to be directed to the moral doctrines of the gospel, stating their opinion, if they will, but not engaging in controversy, even on the subject of the penalty for disobedience.

As the prosperity of my native land, New England, which is sterile and unproductive, must depend, first, on the moral qualities, and, second, on the intelligence and information of its inhabitants, I am desirous of trying to contribute toward this second object also;—and I wish courses of lectures to be established on physics and chemistry, with their application to the arts; also on botany, zoology, geology, and mineralogy, connected with their particular utility to man.

After the establishment of these courses of lectures, should disposable funds remain, or, in process of time, be accumulated, the trustee may appoint courses of lectures to be delivered on the literature and eloquence of our language, and even on those of foreign nations, if he see fit. He may, also, from time to time, establish lectures on any subject that, in his opinion, the wants and taste of the age may demand.

As infidel opinions appear to me to be injurious to society, and easily to insinuate themselves into a man's dissertations on any subject, however remote from religion, no man ought to be appointed a lecturer, who is not willing to declare, and who does not previously declare, his belief in the divine revelation of the Old and New Testaments, leaving the interpretation thereof to his own conscience.

Such were the enlightened provisions of Mr. Lowell for the benefit of his native city. Surrounded by the most enduring monuments of human grandeur, he felt how little can be done to elevate the moral nature of man by exhausting the quarry and piling its blocks of granite to the clouds. As far as we can judge from the unparalleled number and gigantic dimensions of the temples, palaces, gateways, alleys of sphinxes,

and cemeteries, that cover the site, and fill up the environs of Egyptian Thebes, the resources of the monarchs, who made it their residence, must have exceeded those of the Roman Cæsars, when the world obeyed their scepter. But when we inquire after the influence of this mighty monarchy on the welfare of the human race; when we ask for the lights of humanity that adorned its annals,—for the teachers of truth, the discoverers in science, the champions of virtue, the statesmen, the legislators, the friends of man,—it is all a dreary blank. Not one bright name is preserved in their history; not one great or generous deed, if ever performed, has escaped from oblivion; not a word, ever uttered or written by the myriads of rational beings, the lords or the subjects of this mighty empire, has been enbalméd in the memory of mankind. A beam of light from the genius of a modern French scholar, cast upon the sculptured sides of obelisks and temples, has rendered the names and titles of forgotten Pharaohs from ages of oblivion; but no moral Champollion can pour a transforming ray into the essential character of the Egyptian monarchy, and make it aught else than one unbroken record of superstition, ignorance, and slavery.

Mr. Lowell, well versed in the history of ancient times, musing amidst the ruins of this unconsecrated magnificence, seems, with a yearning heart, while the hand of disease still lay upon him, to have desired, as far as an individual could effect it, to secure his beloved native land from the blighting influence of those causes which preyed upon the vitals of this primal seat of empire. These causes were well known to him,—known from history,—known from their existence at the present hour, in the same wretched region. There was no free cultivation of intellect in Egypt,—no popular education,—no public liberty. The resources of the monarchy were lavished on the wars and luxury of its princes. The soul-crushing despotism of mystery checked all development of the common mind. In consequence of the slavery of *caste*, religion,—instead of being a source of light, of social improvement, and happiness,—was an additional instrument of subjection. It chiefly employed its energies in the disgusting art of preventing the clay that perishes from returning to its kindred dust. Nor was this the worst. The priesthood made themselves the exclusive depositaries of learning. If we can trust the accounts of the ancient writers, the import of those hieroglyphical characters in which the Egyptian wisdom is recorded, was a mystery known only to the priests, and those to whom, in their secluded cells, they chose to confide it. Well might it have been expected that the knowledge of it would perish. It had no root in the intelligence of the people; it was the secret of a caste, and it died out with the privileged order by which it was engrossed. The pyramids themselves could not crumble,—the sculptured granite, in that mild climate, could not lose its deeply graven character;—but, instead of handing down an intelligent record of the monarchs who reared their mountain masses, and now slumber in their monumental caverns, they stand but as eternal mementos how perishable is all glory, how fleeting is all duration, but that of the improved mind.

The few sentences penned, with a tired hand, by Mr. Lowell, on the top of a palace of the Pharaohs, will do more for human improvement than, for aught that appears, was done by all of that gloomy dynasty that ever reigned. I scruple not to affirm that, in the directions given by him for a course of popular instruction,—illustrative of the great truths of natural religion and the evidences of Christianity, and unfolding the stores of natural science and useful knowledge,—to be dispensed without restriction to an entire community,—there is a better hope that mental activity will be profitably kindled, thought put in salutary motion, the connection of truth with the uses of life traced out, and the condition of man benefited, than in all the councils, rescripts, exploits, and institutions of Sesostri and his line. I am persuaded that more useful knowledge, higher views of the works of God, deeper and more searching glimpses into the mysteries of nature, will be communicated in a single course of lectures on this foundation, than lies hidden in the hieroglyphics that cover the Egyptian temples, from the cataracts to the mouth of the Nile, although every character, according to M. Arago's suggestion, should be copied by the Daguerreotype, and fully explained by the key of Champollion. Let the foundation of Mr. Lowell stand on the principles prescribed by him; let the fidelity with which it is now administered continue to direct it; and no language is emphatic enough to do full justice to its importance. It will be, from generation to generation, a perennial source of public good,—a dispensation of sound science, of useful knowledge, of truth in its most important associations with the destiny of man. These are blessings which can not die. They will abide, when the sands of the desert shall have covered what they have hitherto spared of the Egyptian temples; and they will render the name of Lowell, in all wise and moral estimation, more truly illustrious than that of any Pharaoh engraven on their walls. These belong to the empire of the mind, which alone, of human things, is immortal, and they will remain as a memorial of his Christian liberality, when all that is material shall have vanished as a scroll.

Mr. Everett anticipates the results of the Lowell Lectures on this department of popular education.

Notwithstanding the great and unquestioned benefit which must accrue to the community, from the delivery of so large a number of lectures on scientific and literary subjects to voluntary audiences of both sexes, there are two points in which the system is evidently defective. In the first place, the means of the institutions, under whose auspices most of the public lectures are delivered, are inadequate to hold out a liberal and certain reward to men of talent and learning, for the preparation of well-digested and systematic courses. The compensation must be limited to a moderate fee, paid from the proceeds of the subscriptions to the courses. A necessary consequence is, that the greater part of the lectures are miscellaneous essays, delivered by different persons, without reference to each other. These essays are often highly creditable to their authors as literary efforts; and, in the aggregate, no doubt, they are the vehicle of a great amount of useful knowledge. But it can not be denied that the tendency of lectures, prepared under these circumstances, is to the discussion of popular generalities, for the production of immediate effect; and that a succession of such lectures during a season can never be expected to form a connected series, upon any branch of useful knowledge. A few

instances of continuous courses, delivered in exception to the foregoing remarks, will not, I presume, be considered as inconsistent with their substantial accuracy.

In another respect the system obviously admits improvement. Although the length of time for which these lectures have been delivered among us, with increasing public favor, is matter of just surprise, in the absence of all established funds for their support; yet there is just ground for apprehension, that the system may not prove permanent without further provision to sustain it. Whatever relies for its support on retaining the public favor, without a liberal compensation for the performance of labor, and without the means of withstanding the caprices of fashion and the changes of popular taste, is, of course, in some danger of declining, when the attraction of novelty is over, and the zeal of a first enterprise is exhausted. Even if there were no just ground to fear an entire discontinuance of the lectures, it is obvious that the present system contains no principle for such a steady improvement in the character of the instruction they furnish, as is necessary to make them a very efficient instrument of raising the literary and scientific character of the community.

For each of these evils an ample remedy is found in the provisions of Mr. Lowell's bequest. It holds out the assurance of a liberal reward for the regular delivery of systematic courses of lectures. By the positive regulations of the founder, these courses will extend to some of the most important branches of moral, intellectual, and physical science; while the trustee is enabled, in the exercise of the liberal discretion reposed in him, to make provision for any lectures, which, in his judgment, may be most conducive to the public improvement. The compensation, which is provided by the bequest, is sufficient to reward the lecturers for the elaborate and conscientious preparation of their courses, and consequently to command the highest talent and attainment engaged in the communication of knowledge in this country; and this, not for the present season or the present generation, but as long as it is possible for human wisdom and human laws to give permanence to any of the purposes of man, for all coming time.

We may therefore consider it as certain, that all who are disposed, in this community (within the limitation, of course, of the capacity of our largest halls to accommodate an audience,) to employ a portion of their leisure time in the improvement of their minds in this way, will henceforward enjoy the fullest advantage of regular courses of public lectures, delivered without expense to those who hear them, by persons selected for their ability to impart instruction, and amply rewarded for the labor of faithful preparation. While the public are reaping this advantage, the permanent funds provided by the founder's bequest will constitute a very important addition to the other existing inducements to the pursuit of a studious life; and may, in that way, be expected gradually to exert a sensible influence, in elevating the scientific and literary character of the country.

It may also be observed, that, so far from preventing the delivery of other courses of lectures on the plan hitherto pursued, this foundation may be expected to extend its beneficial influence to them. It is physically impossible that much more than a tenth part of the whole number of those estimated to have attended the lectures of the last season should be accommodated in any one hall; and a single repetition is all that can be expected of any lecture on the Lowell foundation. A very great demand for other courses will therefore continue to exist; and the Lowell Institute, by causing the preparation and delivery of a steady succession of lectures, capable of being repeated before other audiences, will facilitate the supply of this demand. It will no doubt become easier than it has heretofore been, for other institutions, with the command of limited means, to procure for their audiences the advantage of systematic courses.

IX. AUGUSTUS HERMANN FRANKE.

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

AUGUSTUS HERMANN FRANKE, the founder of the Orphan House at Halle, and of all the institutions which cluster around it, was born March 22, 1663, in Lubeck, where his father was syndic of the cathedral-chapter of the town. In 1666, the father removed to Gotha, and became privy counselor and counselor of justice under Duke Ernst the Pious; but died in 1671. The orphan boy attended the gymnasium at Gotha, where he was declared ready to graduate in his fourteenth year. He, however, did not go to the university of Erfurt until his sixteenth year; whence he removed in the same year to Kiel, where he studied chiefly under the instruction of Kortholt. Under him he heard lectures on metaphysics and ethics; under Morhof on physics, natural history and universal history. He also read carefully the rhetoric of Aristotle. Theology was with him only an affair of the head.

From Kiel, he went to Hamburg, in 1682, where he studied Hebrew for two months under Ezra Ezard. He then lived in Gotha for a year and a half, in which time he read the Hebrew Bible seven times, and studied French and English. In 1684, he went to Leipzig, where he took his degree and *habilitated* himself by a disputation *De Grammatica Hebraea*. His most important lectures were a biblical course. He explained, after the afternoon's sermon, a chapter from the Old and one from the New Testament, first philologically and then practically. Spener, then court chaplain at Dresden, took much interest in these lectures, which were attended by an extraordinarily large number of hearers. About the same time, Franké translated two works of Molinos, for which reason he was considered a friend of Quietism and of Catholicism.

In 1687, Franké went to Luneburg, to superintendent Sandhagen. Piously brought up, he had always prayed, from a boy, that his whole life might be devoted only and entirely to the glory of God. But when, at the university, theology became to him merely a heartless study, his inward peace of mind left him. In Luneburg he grew uneasy, and was assailed by painful doubts. He himself relates that his opinion of the Bible became quite uncertain. The Jews, he often

reflected, believe in the Talmud, and Turks in the Koran, and Christians in the Bible. Which is right? This contest of doubt had arisen to its greatest height, when it became his duty to preach upon the words,—“But this is written; that ye believe that Jesus Christ is the Son of God, and that ye have life through faith in his name.” He was to speak of true and living faith, and was conscious that he himself had not this faith. He was already thinking of refusing to preach the sermon, when he besought God for help in his perplexity. He was quickly heard, and all his doubts were removed. “I was assured in my heart,” he says “of the grace of God in Jesus Christ; and I could call him not only God, but my father.” Forty years afterward, in this last prayer, he referred to this, his real conversion.

From Luneburg he went, in 1687, to Hamburg, where he remained until Easter, 1688. Here he established an infant school, which was numerously attended. Teaching gave him self-knowledge; by it he learned patience, love, forbearance. “Upon the establishment of this school,” he says, “I learned how destructive is the usual school management, and how exceedingly difficult the discipline of children; and this reflection made me desire that God would make me worthy to do something for the improvement of schools and instruction.” The result of his experience he put together in a work, “*Upon the education of children to piety and Christian wisdom.*” He often said that this work of instructing youth at Hamburg was the basis of all that God afterward did through him. It was upon the remembrance of it that he said, at Halle, that education would never be bettered by mere writing of books; but by working at it.

From Hamburg he went, after two months, to Spener, at Dresden, then published his biblical lectures at Leipzig, and, in 1690, was invited to become deacon in the church of St. Augustine, at Erfurt. Here, however, he soon became suspected of being the founder of a new sect, for which reason he was, by a decree of the elector of Mainz, and a vote of the council, of September 18th, 1691, prohibited from any further filling of his office.

Just at that time the university of Halle was founded, chiefly by the efforts of Spener, who was appointed, in 1691, high consistorial counselor and provost at Berlin. On the 21st of December, 1691, Franké was designated as a suitable man for professor of Greek and Oriental languages, in the new university; and at the same time the pastorate of the suburb of Glaucha was offered him. On January 7th, 1692, he removed to Halle, where he lived and labored for thirty-five years afterward, to the end of his life.

The opening of the year 1694 is to be considered the time of the

beginning of all the great institutions of Franké. They commenced as follows. The poor were accustomed to come every Thursday to the parsonage. Instead of giving them bread before the door, Franké called them into the house, catechised the younger, in the hearing of the elder, and closed with a prayer; and in his own poverty he began to lay by money for the poor, by depriving himself for a long time of his supper;* and, in 1695, he fixed up a poor's box in his room, with the following text.

"Whoso hath this world's goods, and seeth his brother have need, and shutteth up his bowels of compassion from him, how dwelleth the love of God in him?"—1 John, iii. 17.

"Every one, according as he purposeth in his heart, so let him give; not grudgingly or of necessity; for God loveth a cheerful giver."—2 Cor. ix., 17.

In this he once found seven florins, left by a benevolent lady. Upon taking out this, he said, "this is a handsome capital; I must found some good institution with it. I will found a poor school." On the same day he bought two thalers worth of books, and employed a poor student to teach the children two hours daily. Of twenty-seven books given it, only four were brought back. But Franké bought new books, made a schoolroom of a room next his study, and gave the children alms three times a week. The children of citizens soon began to attend, each of whom paid one grosch as tuition fee, so that the teacher was better paid, and was enabled to give five hours of teaching daily. During the first summer, the number of children in the school reached sixty.

The reputation of Franké's great activity in the cause of the poor soon spread abroad, and, from that time, contributions began to come to him from far and near; in proportion as this increased, his plans enlarged. Still, it often happened that in firm faith he undertook something great without any means, and that these means came to him at the necessary time in the most wonderful manner.

His parsonage soon became too small for the school. He hired a room in the neighboring house and made two classes, one of the poor and the other for the citizens' children, each with its own teacher.

The wish soon sprung up in Franké's mind not only to instruct, but also to educate the children; a wish to found an orphan-house. A friend gave him for this purpose five hundred thalers, and in November, 1695, nine orphans were already assembled, who were brought to him by citizens. Neubauer, a student of theology, was employed as overseer.

In the same year, 1695, three young persons of noble family were

* He sent to a friend, who was in want about this time, one hundred and fifty thalers, which he had received from the bookseller for his *Biblical Improvement*.

put under Franké's care to be instructed and educated. This was the first beginning of the present Pædagogium.

In 1696, Franké bought a second house. The number of orphan children in these two houses, in that June, reached fifty-two. At the same time he established a free table for students, at which forty-two were fed in three months.

As the number of children increased, Franké determined to build an orphan-house. For this purpose he sent Neubauer, the overseer of his orphan children, as early as 1696, to Holland, in order to gather information. At his return, this true and intelligent man took the direction of the building of the orphan-house; and the corner stone was laid, July 24, 1698. There were already one hundred orphans, and five hundred children were receiving instruction.

It is impossible to read without edification how the blessing of God was with all which Franké, in his unselfish Christian love, undertook. We can here mention only a few of the many examples of these blessings, which he himself relates. Once, his want of money was extreme. "When I went out into the beautiful weather," relates Franké, "and looked upon the clear heavens, my heart was much strengthened in faith, so that I thought within myself, how beautiful it is, when, although man is nothing of himself, and has nothing to rely upon, he recognizes the living God, who made the heavens and the earth, and puts all his trust in him, so that even in want he can be peaceful. Upon my return to the house, there came an overseer who wanted money for the work-people. 'Has any thing come in?' he asked. I answered, 'No; but I have faith in God.' Scarcely had I uttered the words, when a student was announced to me, who brought thirty thalers, from some one whose name he refused to give. Then I went back into the room and asked the other how much he wanted to pay the workmen. He answered, thirty thalers. I said, here they are; and asked whether he wanted more. He said, No; which much encouraged both of us, since we saw in it so evidently the hand of God, who had given what was needful in the very moment when it was wanted."

In 1698, relates Franké further, "I sent to a pious and distressed Christian woman one ducat. She replied to me, that the ducat had come to her at a time when she was in much need of it; and that she had prayed God that he would bestow upon my poor orphans a heap of ducats in return. Soon afterward were brought to me four ducats, and twelve double ducats. On the same day, two ducats were sent to me from a good friend in Sweden. Not long afterward, I received by the post twenty-five ducats, the giver of whom was not

named. Twenty ducats were also sent me at the same time from one of my patrons. Prince Ludwig, of Wurtemberg, died about the same time, and I was told that he had left a sum of money to the orphan-house. It was five hundred ducats in gold. They were sent to me at a time when I was in the greatest need of them for the building of the orphan-house. When I saw this heap of ducats upon the table before me, I thought upon the prayer of the pious woman, that God would give to my poor orphans a heap of ducats in return."*

In innumerable other cases like these, Franké received help from the Lord. Two productive sources of income are especially worthy of mention. A young theologian, named Elers, had joined himself to Franké. In 1698, he took charge of the printing of one of Franké's sermons, entitled, "On duty toward the poor." Elers laid this and a few other sermons upon a little table at the Leipzig fair, for sale. This was the first beginning of the orphan-house bookstore, which, under the careful and intelligent management of Elers, soon so much increased that it opened branches at Berlin, and Frankfort-on-the-Main. There were sold in them, among other things, all of Franké's very popular works, besides many school-books, some of which passed through a great number of editions. All the gains of the bookstore went into the treasury of the orphan-house.

Franké's second fruitful source of income was from the medicines of the apothecary's shop of the orphan-house. With this he had a singular experience. One Burgstaller, upon his death-bed, left to Franké a legacy "for the establishment of a very splendid apothecary's shop." Franké appointed to the management of the shop, Christian Friedrich Richter, well known for his deeply pious divine songs. After the expenditure of large sums of money, the enterprise began to be profitable in January, 1701. The orphan-house medicines began to be in demand everywhere, wonderful effects were related of them, and great sums accrued to the orphan-house from their sale.

It would require too much time to narrate how the institutions grew with each year; it must suffice to give their condition at two periods.

In 1705, there were in existence the following of Franké's institutions.†

1. The orphan-house proper, containing fifty-five boys engaged in

* King Frederic I, of Prussia, also gave 2,000 thalers, 100,000 brick, and 30,000 tiles, for the building. In 1702, he granted to the Orphan House and the Pædagogium some very valuable privileges. "*Footsteps*," p. 121 and 136.

Envious adversaries accused Franké "of having embezzled many thousand thalers; *item* that the people had sent him money; *item*, that he caught at the money of papists and all manner of visionaries." "*Footsteps*," ch. 3, 94.

† Franké's Institutions, 1, 382.

study, forty-five in mechanic arts; twenty-five girls, and seventeen persons in the household.

2. The seminary for teachers; supporting seventy-five persons, whose board was free.

3. The extraordinary free table for sixty-four very poor students.

4. Eight school classes; with eight hundred scholars, including one hundred and twenty-five orphan children; and sixty-seven teachers.

5. The Pædagogium; with seventy scholars, and seventeen teachers.

6. Bookstore and printing office; fourteen persons.

7. Apothecary's shop; eight persons.

8. Widows' house; four widows.

9. Oriental college; eleven persons.

In 1727, at Franké's death, the following return of the institution was made to King Friedrich Wilhelm I.*

1. The Pædagogium, eighty-two scholars, and seventy teachers and others.

2. The Latin school of the orphan-house; with three inspectors, thirty-two teachers, four hundred scholars, and ten servants, &c.

3. The German burgher school; with four inspectors, ninety-eight teachers, eight female teachers, one thousand and twenty-five boys and girls.

4. Orphan children; one hundred boys, thirty-four girls, and ten overseers and female overseers.

5. Persons boarded free; two hundred and fifty-five students, and three hundred poor scholars.

6. Household, apothecary's shop, booksellers; fifty-three persons.

7. Institutions for females; fifteen in the girls' institution, eight in the boarding house for young women, six widows.

This sketch of the exterior condition of Franké's institution does not however show by any means the whole of his sphere of labor; especially in his pastorate, for the university, the spread of the Bible, and missions. How wide soever were the extensions of these labors, they all sprang from the same root; from Franké's inward Christian love toward God and his neighbor. Only in the name of Christ would he labor or plan; and his expressed wish was, to bring to Christ all whom he taught, from the student down to the youngest of the orphan children.

In this, as in his views of the study of theology, he agreed entirely with his friend Spener. They both repeatedly insisted upon the con-

* Franké's Institutions, 2, 296. In 1707, there were, in the Pædagogium, and the other schools, one thousand and ninety-two pupils, under three inspectors, and eighty-five teachers. Seven hundred and fifty-five scholars were from Halle. *Footsteps*, p. 3, 29.

version and piety of the students : and that theology must not only be an affair of the head, but of the heart.* "One drachm of living faith," says Franké, "is more to be valued than an hundred weight of mere historical knowledge; and one drop of true love, than a whole sea of learning in all mysteries." He was strenuous against the perverted study of what does not look toward the work of real life. "It is the common evil," he says, "that we do not learn what we use in our occupations every day; for it is too small for us; and what we have learned at the university, that we do not know how to use profitably."

Both Spener and Franké, however, were careful to guard against the supposition that they were opposed to theological learning. "If you would become teachers," says Franké to the students,† "it is not enough that you are pious; you must also possess thorough theological learning." "The Christian student," remarks Spener, "prays as earnestly for divine illumination as if he had no need of his own industry, and studies with as much zeal as if he must do every thing by his own unassisted labor. For it would be presumptuousness and tempting God, only to pray, and thus to await the divine help without any industry of his own."

Franké labored in every way in connection with his like-minded colleagues, those able teachers Anton, Breithaupt, and Michaelis, for the good of the young theologians. Lectures were read upon all theological studies, and Franké read besides upon the method of theological study. In the "parenetical lecture," he shows what are the hindrances of young theologians in religion, and in seeking their object in study; and how these hindrances are to be overcome.‡

These lectures he continued weekly through many years, and at an hour when no other lecture was read. He began them in 1693; and the last lecture which he delivered, May 15, 1727, three weeks before his death, was parenetical. In this lecture he combated, with great zeal, the sins of young theologians; he advised them before all things to convert themselves before they tried to convert others, to pray and to labor. He gave them rules for living and studying, drew their attention to all that had been done at Halle of late for students, which had not been thought of at other universities, and which had not been thought of at all in earlier times. Among these things he included this, that the theological students of Halle were spared the usual scholastical disputes, and applied themselves instead to the careful

* "*Idea*," 96. The Bohemian Brothers told Luther that "they could not look for good to result to those in whose schools so much care was expended on learning and so little on conscience."

† *Idea*, 37.

‡ For the students he wrote his "*Idea studiosi theologiae*," "*Timotheus*," and other writings.

exegesis of the Holy Scriptures; and that they had opportunity for practical efforts in catechizing and other instruction. Students newly come must report themselves to the theological faculty, who met upon certain days for that purpose.* Each new comer is to be inquired of, how he has regulated his life and his studies. Once every quarter of a year all the theological students are to meet before the faculty, to give an account of their studies, and to receive counsel for the future. Besides, they are to be encouraged to visit single professors, and to consult with them upon the state of their souls, and upon their studies.

In 1709, Franké delivered some parenetical lectures,† “in which,” as their title states, “the distinctions between the present students of theology there and those who were here in the beginning is shown.” Here he complains, that zeal for good has much diminished with most of them; describes the coarse kind of student-life which has crept in;‡ and remarks how little the well-intended care of the theological professors is recognized by the students; that the latter rather complain about them, as if they made invasions upon their freedom as students; and that their good advice produces no results.§ “The complaint is often heard,” he remarks, “of the students of Halle, that they are hypocrites.” “I can not think of this without great sorrow; and can not enough wonder at it,” he says, “how it should be possible that, from all our lectures and admonitions, so little effect should have come.”

A reaction was produced. In place of the prevailing useless student-life, Franké and his theological colleagues, with one blow, succeeded in introducing the still, pious, almost Christ-like state of discipline, which it would be well worth while to compare with the life of the Hieronymians.|| One devotional exercise after another was attended. Pious emotions and incitements were encouraged in all ways. At every opportunity all prayed, preached, exhorted, and sung.¶ It is no wonder that a mode of life diametrically opposed to this, a student-life of coarse immorality, rooted deep in the customs of so many centuries, should make a strong opposition against Franké's efforts, so that he only succeeded in attracting to himself youths of

* “Appendix to the representation,” p. 198.

† *Lectiones par.*, part 4, p. 73, &c.

‡ Ib. “A *Studiosus Theologus* must know this rule: *Quod in aliis est peccatum veniale, id in clerico, and also, moreover, in studioso theologia est peccatum mortale.*”

§ Ib., III. “Formerly, the *theologia studiosi* rather thought it a benefit, that their *studia* were directed by the Faculty.” See also p. 39.

|| Ullmann's “Johann Wessel,” p. 23 (1st ed.)

¶ Niemeyer's *Principles*, 8th ed., 3, 348. Semler's autobiography has much information on the same subject.

quiet and thoughtful character. There do not seem to have been enough pains taken to devise means for winning others; to practice a Pauline accommodation, such as is of no injury to truth or holiness.

I doubt much whether Luther would altogether have approved of the ideal of the student-establishment of Franké and Spener. How violently did Luther inveigh against all manner of monkish restraint! "Pleasure and amusement,"* he says, "are as necessary to young people as eating and drinking." How strongly does he recommend "music and knightly games, fencing and wrestling; of which the first dispels care of the heart and melancholy thoughts, and the others bring the body to its proper proportions and keep it in health." There is danger of falling into drinking, debauchery, and gaming, "if such honorable exercises and knightly games are condemned and neglected."†

Franké's complaints of the ignorance of the students at entrance are worthy of attention. That he advises them to take lessons in writing, I am sorry to say, need not surprise us;‡ but in regard to spelling the case was as bad. "I find," he says,§ "that there are few theological students who can write a German letter correctly spelled. They violate orthography almost in every line. I even know of many examples where, after they have entered upon the ministry, and have had occasion to have something printed, it has been necessary to have their manuscript first corrected almost in every line; insomuch that it has been recommended to them to have their work transcribed by some one who understood spelling, in order that it might be read without difficulty. The reason of this defect is usually in the schools, where only the Latin translation of their exercises is corrected, but not the German; so that they learn nothing of spelling. They do not learn to distinguish in their spelling such as *er war, die Wäar, es ist wahr*, and the like, and can not, so long as they write their German exercises in so superficial a manner."||

It may be imagined that, in proportion as German was neglected at the schools, Latin was more thoroughly learned. But this was not so. "In many cases," continues Franké, "when they desire to write a Latin letter, it appears that they have not learned the grammar of the language; which occasions many faults." The same students, at

* See Part First, 141, 177.

† The eating and drinking life of dissipated students, as Franké described it, might well destroy hopes for such men, even if they should apply themselves to "honorable exercises and knightly games."

‡ "It is seldom that one writes a good hand when he comes from school."

§ Lect. parmenet., 4, 280. Comp. "Appendix to the picture of a theological student," p. 280.

|| "Appendix to the picture," &c., p. 281. "There is seldom as much as a *qualemcunque peritiam* in German orthography brought from the schools."

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entering, are not well grounded even in Luther's catechism. "At the same time," he says, "it is seldom the case that any one brings with him a knowledge of vulgar arithmetic, although it is of continual use in common life."^{*}

In another place, Franké says† that the theological professors of Halle "have found, with great grief, that most of the schools are so ill taught, that from them there come pupils of twenty years and over, who have, notwithstanding, to be taught the very rudiments of Latin, not to mention Greek and Hebrew, if they are to attend the lectures with any profit. The universities also," he goes on, "have found, by sad experience, that many unqualified and ignorant persons enter them, who are not fit to be taught any thing." The teachers of the schools ought to perform their duties more conscientiously.

While Franké tried all means to enable those who were backward in their school knowledge to recover their lost ground, he sought, on the other hand, by every possible means, to promote instruction in all the school studies; languages, history, geometry, mathematics, &c.‡ In the institutions founded by him, which contained nearly two thousand scholars, there were taught more than one hundred students, under the oversight and guidance of inspectors. They were especially trained in catechising. "The whole of the so-called ordinary table of the orphan-house," says Franké, "now including one hundred and thirty-four students, is in fact a seminary of preceptors for the rest of the institution.§ From these "some were selected and placed in the select seminary of preceptors." This latter seminary was commenced in 1707. From ten to twelve theological students were chosen for it, well grounded in their studies, and with an inclination and aptitude for their business of school teaching.|| They were trained for the occupation of teaching during two years, by lectures and practice. They received their board there, but were required to bind themselves to teach in the Pædagogium, or the orphan-house, for three years, after the expiration of the two years.¶

We have seen that, in 1695, Franké founded a poor school, to

* Ib.

† Ib., 275.

‡ Ib., 284, 274, 277, 289, 290.

§ The first occasion of the foundation of this free table and seminary, was a gift of five hundred thalers, which he received, in 1695, for poor students. "Footsteps," Third Part, 2.

|| "Footsteps," Third Part, 2. Fifth Part, 60.

¶ In 1702, Franké founded, together with Anton and Breithaupt, the *Collegium Orientale Theologicum*, in which, besides Hebrew, Syriac, were taught, Chaldee, Arabic, &c. The students at this college were of much service to J. H. Michaelis, by collating MSS. for his edition of the Hebrew Bible. It contained twelve students; it seems to have lasted until 1720. Johann Tribbechor, of Gotha, was its first principal; the same who was author of that "astonishing hymn,—“O, thou guard of Israel.” Michaelis was connected with him in its management. "Footsteps." Second Part, 5. Third Part, 5.

which children of citizens came. In 1697, he established the Latin school for boys of a better order of talent. The poor school received the name of the German burgher school, and was divided into the boys' and girls' school. At Franké's death, as above related, there were in the burgher school one thousand seven hundred and twenty-five boys and girls, in the Latin school four hundred scholars, and twenty-five more in the Pædagogium. The course in the German school at first included religious instruction, reading, writing, and arithmetic; to which were afterward added, natural history, history, geography, &c. An overseer was placed over all the German schools, to whom was also intrusted the preparation of proper teachers for them. The girls were to be especially instructed in woman's work, and even the boys received instruction in knitting.*

In the Latin school, were taught (besides religion, reading, writing, and arithmetic,) Latin, Greek, Hebrew, mathematics, history, geography, and music. "Classic Greek was much neglected for the constant reading of the New Testament."† The oldest accounts mention botany as one of the branches of instruction at this school. In 1709, Latin was taught in seven classes;‡ and physics, painting, and anatomy were introduced among the studies. In 1714, oratory and logic were added; but, on the other hand, French is wanting.

Franké intended the Pædagogium for the instruction of the sons of those of the higher ranks. As we have said, three young noblemen were sent to him in 1695; which was the beginning of the institution. The number of scholars grew, and, in 1705, was 70; who boarded here and there in citizens' houses. In 1711, Franké determined to build a large house for it, which was completed and occupied in 1713. The accommodations for scholars and overseers in it were convenient and cheerful, not dark and cloister-like. Additions to this soon showed that Franké was looking to real instruction; there were connected with the Pædagogium a botanical garden, then a natural cabinet, a philosophical apparatus, a chemical laboratory, conveniences for anatomical dissections, also turning-lathes, and machinery for glass-cutting.§

The course of study of the Pædagogium was thus stated, in 1706:

* In 1701, Franké appointed for this purpose an especial knitting-master. "*Footsteps*," Part First, 46.

† Niemeyer, 3. 348. Rector Mal, from Franké's school, banished the Greek Classics from the gymnasium at Hersfeld, and substituted the reading of the New Testament, even to the Apocalypse. (Programme of director Dr. Muencher, 1837.)

‡ By the subdivision of *Secunda*, *Tertia*, *Quarta*, and *Quinta*, the whole number of classes reached eleven.

§ Franké's Institution, 2, 14, &c. Further details upon the Pædagogium are given in Franké's book, "Complete order and method of teaching for the Pædagogium," 1701.

"Besides the grounds of true Christianity, they will be instructed in the Latin, Greek, Hebrew, and French languages, as well as in a good German style, and in writing a good hand; also in arithmetic, geography, chronology, history, geometry, astronomy, music, botany, and anatomy, besides the chief principles of medicine, * * * and moreover, in the hours of diversion, they find opportunity to learn turning, glass-grinding, painting, writing, &c. During all recreations, when they might be liable to injury, they are under careful supervision, and are not left alone during the night." It is stated as a characteristic feature of the *Pædagogium*, that in it "the classes are so arranged that the scholar has a place not only in one class, but in this or that class differently, according to his proficiency in different studies. For example, he may be in the first class in Latin, in another in Greek, and in like manner may have fellow-students as far forward as he in every study. First of all, the scholar must be thorough in Latin, but in the other languages and studies he may take up only one after another, in such a way as to learn one well before he undertakes the next."

A special class, *Selecta*, was organized in the *Pædagogium*, for preparation for the university. The scholars of this class read many of the Latin authors cursorily, disputed, spoke frequently, studied rhetoric, logic, metaphysics, a kind of dogmatics, and read part of the Old and New Testaments in the original. The Greek classics were not mentioned; but for them were substituted the homilies of Macarius, Nonnus' paraphrase of John, &c.*

For instruction and oversight, so far as number of persons is considered, the *Pædagogium* was richly endowed. At Franké's death it contained eighty-two scholars, for whom were employed one inspector, one mathematical teacher, eighteen ordinary teachers, eight extraordinary ones, and ten assistants.

Only a small number of teachers in comparison were employed for the great number of scholars in Franké's institution; most of the school work being done by a large number of students, who had received a preparation for this purpose in the two seminaries already mentioned. Franké proposed in this way to select young men of character similar to his own, and who should be trained up in the methods used in the orphan-house school. Inspectors watched carefully that none of them varied from the established way. In this manner it could not fail to happen that, notwithstanding the great extent of the institution, all the teachers in it should teach in the same spirit, and to the same end.† But we must not pass over the dark side of

* Prudentius' hymns were also read; and dialing was added to the mathematical studies.

† Franké's Institutions, 2, 39. "Candidates and students were selected for teachers, to whom Franké prescribed a method of instruction which they must follow strictly. Most of them

this plan. This unity of the whole was liable easily to become a monotony, the unity of a machine, in which no part makes or can make pretensions to independence. The students bound themselves to teach for three years, and then left the institution. In so short a space of time, how could they attain to independent knowledge and skill in the pedagogical art? * What earnest teacher has not found that this vocation is an art to the acquisition of which time is necessary that in the first years of his teaching much of his labor was injurious to himself and his scholars, and that he only attained to skill after a long time? Thus it was with Franké, who had in his institution only a very few masters of the art of teaching, but a preponderating crowd of dependent beginners, whose mistakes were only partly compensated by their thorough subordination. †

Franké was director of his institution; but first named, in 1716, as sub-director, Joh. Daniel Herrnschmid; and, after his death, in 1723, his own pious son-in-law, Joh. Anastasius Freylinghausen. ‡ After the death of Tollner, in 1718, who had held the oversight of both the Latin and German schools, Herrnschmid took that of the Latin school, which was from that time separate from that of the German school.

In order to comprehend the peculiarities of Franké's school, it must be remembered that it was especially characterized by its prevailing Christian or perhaps pietistic element, which appears in its many devotional exercises, in the neglect of the Greek classics for the New Testament, and in the study of Hebrew for the understanding of the Old Testament. It is also a peculiar trait of the school, that real studies had a prominent place in it; that the scholars were allowed

willingly followed his directions; for, up to that time, they had had no method of their own to which they had become used, as is usually the case with men who have already taught in other schools."

* Hieronymus Wolf, the learned Rector of the Augsburg Gymnasium, says: "It was exceedingly desirable that such young teachers should be employed, by what may be called an appropriate good fortune, in a school where, the labor being endurable and the wages accordingly, and great enough to support themselves and their families, they would not be seeking better situations. For a frequent change of teachers has many disadvantages: and it is not possible for one to teach faithfully and thoroughly, who is on the watch for every opportunity to better his situation, and who is seeking to serve, not the minds of his scholars, but his own ease and pleasure." (Programme of the Augsburg Gymnasium, by Dr. Mezger, 1834, p. 11.)

† This is no reproach to Franké. One who is endeavoring, like him, to assist a large number of children, must adapt himself to circumstances. The monitors of Bell and Lancaster were certainly not as good assistants as the students of Franké.

‡ Herrnschmid was born in 1675, at Bopfingen, in Suabia, and was the author of several sacred hymns; among others, of "Praise the Lord, O thou my soul." Freylinghausen was born at Gandersheim, in 1670, and died in 1739, in his place as director of the Orphan House. He was distinguished for excellent sacred hymns; and his volume of them marks an epoch in their history. Herrnschmid was succeeded, as Inspector of the Latin school, by several eminent men, as Johann Jacob Rambach, Sigismund Jacob Baumgarten and August Gottlieb Spangenberg, who was afterward Bishop of the United Brethren.

different places in different classes, according to their progress in different studies; and lastly, that many of the students also gave instruction, and in a prescribed and strictly-followed method.

After having thus surveyed the numerous pedagogical labors of Franké,—for the university, for the Latin schools, burgher schools, and orphana,—we will now consider two departments of his efforts which had only an indirect influence upon pedagogy.

The first is the Canstein Bible Institution, which was annexed to the orphan-house.

Carl Hildebrand, Baron von Canstein, born in 1667, was lord marshal, and president of the supreme court of judicature, of the electorate of Brandenburg, and the trusted friend of Spener. In 1710, he published a pamphlet, with the title: "Humble proposal how the word of God may be brought into the hands of the poor for a small price." His plan was, "by means of the institution, to keep forms standing, and to print one hundred thousand copies of the Bible before the types were worn out." He put the sale into the hands of Franké's orphan-house; and Prince Carl of Denmark, brother of King Frederick IV, gave for the purpose one thousand two hundred and seventy-one ducats. The first edition of the New Testament under this arrangement appeared in the year 1713. And, up to 1795, there had been printed in the institution one million six hundred and fifty-nine thousand eight hundred and eighty-three Bibles, eight hundred and eighty-three thousand eight hundred and ninety New Testaments, sixteen thousand copies of the Psalms, and forty-seven thousand of Sirach. Luther's text was strictly adhered to, with only a few changes universally recognized as necessary, and which were made with the utmost diffidence and care, for fear of exciting attention and opposition.

A second department of Franké's activity was missions. King Friedrich of Denmark, under the influence of his two German court chaplains, Masius and Lütken, applied to Franké for this purpose. Bartholomäus Ziegenbalg, and Heinrich Plutschau, were selected by him as missionaries, were ordained in Copenhagen, and landed at Tranquebar, July 9th, 1706.

This was the beginning of this important mission of the Lutheran church, which lasted more than a century. With a depth of love that believed all, and hoped all, the missionaries from Halle labored perseveringly and faithfully, when all hope seemed to have departed. In evil times, when pestilence, famine, and war prevailed, they were in many ways the advisers and helpers of the natives. Ziegenbalg, at unbounded sacrifices, and with vast zeal, translated a great part of the

Bible and of the small Lutheran catechism into Tamul, wrote hymns in that language, and with great industry composed two dictionaries and a grammar of it. His worthy successor, Benjamin Schulze, completed his translation of the Bible. The influence of the missionaries grew so fast that it was not confined to Tranquebar. From the year 1728, they were induced and aided to found Lutheran missions at Madras, Cuddalore, Calcutta, Tanjore, and elsewhere.*

Schwarz distinguished himself above all the missionaries. He was held in high respect by those of all sects. While the East India Company, in 1779, employed him as an envoy to Seringapatam, and the English in 1784, in the negotiation with Tippoo Saib, he was so highly regarded by the Rajah of Tanjore, that the latter, upon his death-bed, in 1787, required him to undertake the guardianship of his adopted son, then nine years old. Schwarz died in 1798. In 1816, Middleton, English bishop to Calcutta, visited this son, then King Sirfogan, in Tanjore; the king, says the account,† “was no believer in Christianity, but to the end of his life he wept tears of love and gratitude for the well-remembered missionary Schwarz, whom he was accustomed to call not only a great and good man, but his father, and the friend, protector, and king of his youth; and to whose memory he had erected a costly marble monument, which was made in London, and solemnly set up in the Christian church at Tanjore.”

The missionaries from Halle applied themselves particularly to the instruction of the Hindoo youth, by which means they trained up many Hindoo catechists, who rendered valuable assistance in converting their countrymen.‡

This is not the place to give a detailed history of the Halle mission. From 1705 to his death, Franké was actively laboring for it in many ways. Of these the chief was the careful choice of missionaries, who were selected from the theological students of the school at Halle, without special preparation for the missionary service.§ From 1710,

* The Anglican church had not hitherto interfered with the missions; no missionaries had received its ordination, or subscribed to the thirty-nine articles. Most of the missionaries, from 1731 to 1792, were ordained at Wernigerode, by the Lutheran church. See Franké's *Institutions*, pp. 3, 366, 383, 399, 518, 552. So far from the Lutheran missionaries being under the government of the Anglican church, it was especially remarked, in regard to the Lutheran missionary, Diemar, “that (in London,) his great faults being well understood, he found at first no very encouraging reception; but that he afterward, by his pretences, succeeded in enlisting many upon his side; and, in the hope of afterward deriving benefit from it, submitted to episcopal ordination.”

† “Later history of the evangelical missions,” by Knapp, 67th part, p. 633.

‡ The number of members upon the church book at Tranquebar, in the space from 1706 to 1780, was 16,566. Franké's *Institutions*, 3, 248.

§ This has been the rule down to the latest times; it has been remarked by the late Knapp, of only one missionary, that he had not studied, but had shown himself endowed with distinguished talents.

he was preparing for the publication of a "History of the evangelical missions for the conversion of the heathen in India;" he caused a Tamul printing press to be sent from Halle to Tranquebar; large sums were intrusted to him with confidence for these missions; and his name was the security of the undertakings. Even in his last address he showed how dear it was to his heart.

We have thus considered Franké's direct efforts, in the most various directions. These labors however appear much greater when we examine their indirect results. How many orphan-houses and poor-schools may thank his example for their existence; how often to-day is his name mentioned in reports upon reform institutions! What an impulse did the Halle mission give to Protestants; and how dear to their hearts and consciences did the spread of Christianity become by this means! Zinzendorf, the founder of the Herrnhuters, was a pupil of Franké's, and how great are the blessings which the Herrnhuters have distributed among the most outcast of the heathen! Was it not the example of Franké which, in 1727, led professor Callenberg, of Halle, to found an institution for the conversion of Jews and Mohammedans; and was not this mission the forerunner of the present mission to the Jews? Lastly, was not the Canstein Bible Institution, which has distributed, at exceedingly low prices, more than two million copies of the Bible, the New Testament, the Psalter, &c., the forerunner of all the Bible societies of the present day? *

We have pursued Franké's life up to 1694 only; although might we not say that his life was most properly characterized by his efforts and institutions; that he lived entirely in what he considered his divinely-given vocation?

I shall here add but little. In that year, 1694, he married a Miss Von Wurm, with whom he lived thirty-three years, until his death, in happy marriage. They had three children. The first, a son, died early. The second son, Gotthilf August, born in 1696, was Franké's successor in the direction of the institutions; the third child, a daughter, married Freylinghausen in 1715. Franké's domestic life, in the small circle of his family, was wholly characterized by his pious spirit. Up to his sixty-third year, he enjoyed, on the whole, good health. If at any time he found himself overworked, he relieved himself by travel. In 1725, he was attacked by a painful dysentery, and in Nov., 1726, he was lamed in his left hand by an apoplexy. He however felt himself so much stronger in March, 1727, that he inserted his lec-

* I forbear here to enlarge upon the fact that in Spener and Franké's schools originated an unchurchlike, pietist, and mystical separatism, which has in after times become steadily more and more influential, erroneous, and misleading.

tures in the catalogue of lectures for the summer season. But he delivered only one, on the 15th of May, a parenetical one, which he ended, evidently affected, with the words: "so now go hence, and may the Lord be blessed for ever and eternally."

On the 18th of May, he partook for the last time of the Lord's Supper.

On the 24th of May, he walked in the garden of the orphan-house. Here he poured out his soul in earnest prayer; in which he referred to his conversion at Luneburg. He said: "Under the open heaven I have often made a league with thee, and said, if thou wilt be my God, I will be thy servant. Often have I prayed to thee, Lord, give me children, make them as the dew of the morning, make their numbers as the stars in heaven. Thou hast done it; and hast by my means opened a spring of eternal life, and hast caused it to flow so far that souls have drank of it in all parts of the world. Let it now flow forth and forever, that the blessings may never cease, but may live on to the end of the world."

From that time onward, his pains increased; but he bore them with Christian patience, supported by prayer and the reading of the Holy Scriptures. He often repeated the words of the dying Jacob, "Lord, I wait for thy salvation."

On the 8th of June, he grew weaker and weaker. His pious wife then asked him, "Is thy Saviour still near thee?" "There is no doubt of that," he answered. These were his last words. He now fell into a slumber; and sank away softly and placidly, among the prayers and singing of his family and his friends, at three-quarters past ten in the evening. He had reached the age of 64 years two months and three weeks.

The whole city came forth to see once more the remains of the dead; and followed him to his resting-place, on the 17th of June.

FRANKÉ'S ORPHAN HOUSE IN 1853

Let us now bestow a short glance upon the exterior of Franké's Institutions; placing ourselves, for the purpose, in the so-called Franké's Square. From this, we first see a large building, three stories high, and with fifteen windows in front. In the first story, as we have related, are the book establishment and the apothecary's shop; and, in the second and third, the rooms of the Latin High School, (Hauptschule.) Under two eagles, who direct their flight toward the sun, is the inscription which we have already read: "They who wait upon the Lord shall renew their strength; they shall mount up with wings as eagles." On going up the outer steps, the eye falls upon two large tablets, upon one of which is the inscription, "Stranger! what thou seest is the result of faith and love. Honor the spirit of the founder, by believing and loving like him." The inside of the edifice presents a long street with lofty houses each side. On the right is the common dining-room, and over it the assembly-room, which is for school or religious uses. Next this are the officer's residences, the Canstein Bible Institution, the library, (which has gradually increased by gifts and legacies to 26,000 volumes, and in whose lower story is a high school for girls,) the chief accountant's office, the treasury, and the archives.

On the left hand are, next to the front building, the orphan institution for boys, the rooms of the burgher and free schools, the Mädchenhaus for orphan girls, and two girls' schools. The long building next, with six entrances, the first of which admits to a real school, and the others to many lodging-rooms for teachers and scholars.

At the end of this interior street is a side of the edifice of the Royal Pädagogium, to which, between two courts, is adjoined the main building for the pupils of the institution. South of the great inner street is a second street, with buildings for the domestic departments, bakery, store-rooms for books and bibles, the hospital, and the building yard. Beyond these are the extensive gardens and the beautiful play grounds of the Orphan House and the Pädagogium.

Several of these buildings have, since Franké's death, either been entirely rebuilt or changed by important repairs; the outward appearance of his institutions is, at this day, however, but little different from that in his time.

The schools have been much increased. Franké established the Pädagogium, the Latin school, and the German schools for boys and girls. His successors have maintained these, but, as successive periods required, have added to them a real school, a higher girls' school, a preparatory school for future teachers, and boys' and girls' schools for children entirely poor, quite separate from those in which a moderate rate is required.

The number of scholars has increased remarkably. In 1698, it was 500; in 1707, 1100; in 1714, 1775; in 1727, 2205; and at about 1750, 2500. After that time the number began to decrease, so that at the centennial foundation anniversary there were only 1418. During the present century, confidence in the schools revived; and the attendance upon them has rapidly risen to so great a number as would have been injurious to the grade of the instruction, if care had not always been taken to divide classes when too full. The Pädagogium alone has decreased, by reason of various unfavorable circumstances, so that whereas, fifty years ago, there were 76 pupils in it, there are now but 24. The Latin high school has 475 pupils; the real school 480; the girl's high school 253; the burgher school 714; the intermediate girls' school 406; the free school for boys 315; that for girls 322; so that more than 3000 scholars are now (1853) daily instructed in the institution.

The number of orphans, which in 1798 was 100, was, in 1727, 134; and in 1744, 200. The great scarcity of the years from 1770 to 1773, inclusive, rendered it necessary to decrease this number. In 1786 there were 80 boys and 35 girls; and the number was maintained only by great efforts. At present (1853) there are 114 boys and 16 girls. The whole number of orphans who have been brought up in the institution is 6757; of whom 5450 are boys, and 1307 girls. To so many thousands has it been a foster-mother! See "*August Hermann Franké, or the Power and Blessing of Prayer and Faith*," Breslau.

A full account of the institution for orphans is given by Prof. Bache, in his "*Report on Education in Europe*."

X. JEAN JACQUES ROUSSEAU.

JEAN JACQUES ROUSSEAU, whose educational as well as political speculations exerted a mighty influence on his age, was born at Geneva, in Switzerland, June 28th, 1712. His father was a watchmaker, a good mechanic, and fond of reading; and his mother a woman of considerable beauty, and great intelligence. She died in giving him birth, and for some years he seems to have had little or no instruction or guidance of any kind except from his father, who was too poor, too busy, and, apparently, not quite judicious enough, for the purpose. They read together, before the boy was seven years old, whole nights through, some romances which had been his mother's; and when those were finished, some books of divinity and translations of the classics. Thus the boy learned to love reading, but evidently could not acquire good habits, either physical or mental; and his "*Confessions*" show that he stole, lied, and played dirty tricks. In short, he was a "bright" boy, but indolent, irritable, mischievous, thoroughly unprincipled, untrained, and ill-bred.

With these wretched early habits, which had strengthened his natural evil tendencies, and in a condition of poverty which both prevented their ready gratification and made their precise opposites the indispensable conditions to prosperity and happiness, he entered upon the vagrant and unhappy series of wanderings and adventures which might have been expected. He was placed with an attorney, who discharged him for negligence; then with an engraver, whom he left, as he says, on account of his harshness,—which undoubtedly was only proper strictness. He next ran away from home, for fear of being punished for his vices; and he took refuge with Borney, Catholic bishop of Annecy. Here he asserted himself a convert to Catholicism, and was placed, for religious instruction, with a Madame de Warens, herself a recent proselyte. She in turn sent him to a Catholic seminary, at Turin, where he completed the required preparations, publicly recanted his Protestant belief, and then declined to study for the priesthood. Upon this they dismissed him, with twenty florins; which he spent, became servant to a countess, stole a ribbon, and managed to have the blame laid on a decent waiting-maid in the family. When the countess died he took a place in the family of a nobleman, whose son treated him like a companion, and instructed him. After a time, however, he was disobedient and insolent, and

was dismissed. Penniless, he returned to Madame de Warens, with whom he lived, as a sort of paid lover, for about ten years. She obtained for him a place in a surveying commission, established by the King of Sardinia, and other employments; none of which he had the decency or the industry to retain; forgave him for twice eloping from her; but, becoming at last disgusted by his unfaithfulness, secured him employment as a tutor in a gentleman's family at Lyons. But the desultory studies in music and mathematics, and occasional employment as music teacher, which had occupied him while with her, had not rendered him fit for the regular and decent duties of an instructor; and in a fit of anger and shame he resigned the place, in 1741. He now walked to Paris, with fifteen *louis*, his entire means, in his pocket; in some way got into good literary society; offered the musicians of the city a new scheme of musical notation, which was at once rejected; lived in penury two years, supported by music-copying and obscure employments. At the end of that time his friends obtained him a place as secretary to the French ambassador at Venice, where he stayed two years, living a shamelessly vicious life, quarreled with his superior, and returned to Paris.

Here he hired a small room, and became attached to Thérèse Levasseur, a vulgar and stupid girl, who lived with him as his mistress for twenty years, and whom he then married. They had five children, all of whom the father quietly placed in the foundling hospital, and whom he never afterward tried to identify; nor was he at all interested when some of his friends sought to find them for him. After his death, his wife married a hostler.

He earned a scanty living, after this last removal to Paris, by copying music; and failed in the attempt at operatic composition. After a time he obtained the place of clerk to one of the farmers-general of the revenue, from the profits of which he sent some little money to Madame de Warens, then in great poverty. About 1748, he was employed to write some articles on music for the "*Encyclopædia*," which he did, he says, "very quickly and very ill."

During his life in Paris, his associates were literary men, especially of the school of Diderot and D'Alembert, and a crew of licentious and swindling men of rank and fashion, whom he calls "very agreeable and very respectable."

In 1749, at the age of 37, he made his first successful attempt at authorship, by writing an answer to a prize question proposed by the Academy of Dijon, "*Whether the progress of the arts and sciences has tended to the purification of manners and morals.*" At the suggestion of Diderot, who reminded him of the greater notoriety which he could gain on the wrong side, he took the negative, and found his

line of argument exactly adapted to his modes of thought and feeling. He rapidly composed a violent, brilliant, and eloquent, but sophistical and inconsistent denunciation of civilized life, won the prize, and at once saw himself comparatively eminent.

In 1752, he once more tried operatic composition. His "*Dévin du Village*," (Village Conjuror,) was very successful; and he also wrote a tragedy and three comedies, none of them of much value. During the following year he competed for a second prize offered by the Academy of Dijon, for the best answer to the question, "*What is the cause of inequality among men?*" but did not succeed. The character of this production, and the audacity of his philosophical methods, may be judged of from his own remark that, in composing this treatise, he purposely "looked away from all the facts of history."

The attacks which his first prize essay had occasioned, and others which were caused by a "*Letter on French Music*," in which he contended that the French had not and could not have any vocal music, by reason of the defects of the language, had now gained him considerable reputation. In fact, he had taken advantage of this, to revisit his birthplace, Geneva; and it was while there that he composed his unsuccessful prize essay. He was much caressed; became filled with republican enthusiasm; and, being, in his own words, "ashamed of being excluded from my rights as a citizen by the profession of a faith not that of my fathers," he made another recantation, and publicly professed himself a Protestant.

Having returned to Paris, he gave up, out of fear of persecution, a government appointment, for which he had exchanged his clerkship, and for a long time afterward lived chiefly upon the bounty of his friends, contributed in the shape of wages for copying music.

In 1756, Rousseau, in pursuance of an invitation from Madame d'Épinay, established himself at a house called l'Hermitage, upon her estate at Montmorency, not far from Paris. Here he remained for about ten years, and wrote some of his most celebrated works; "*La Nouvelle Héloïse*," "*Émile*," and the "*Contrat Social*."

The "*Héloïse*" is a novel, without a good plot, and without well-drawn characters; attractive for vigorous language, passionate feeling, and opinions dangerous but seductively expressed. It appeared in 1759, and was followed, in 1762, by "*Émile*," perhaps his greatest or, at least, most celebrated work. This was written for Madame de Luxembourg, and is a singular compound of acute observation, truth, sophistry, rhetoric, and irreligion. It was not so well received by the public as some of his other works, and was with justice condemned by the archbishop and the parliament of Paris. It had a powerful influence on a class of educators, both in Germany and Switzerland.

The "*Contrat Social*" came out very soon afterward. It is only

one part of a great work on political institutions, which he had designed as early as his stay in Venice, and is a scheme of entire social equality. Before the whole of it was printed, the author was informed that government intended to imprison him, and fled to Switzerland. Geneva refused to receive him, and, both there and at Paris, his work was publicly burned by the common hangman. He finally found rest with Marshal Keith, in Neufchatel, where he wrote an answer to the decree of the archbishop of Paris for the burning of "*Emile*" and his "*Lettres de la Montagne*," in which he attacked the clergy and the republic of Geneva, and renounced his citizenship of the latter. A mob, how instigated it is not quite clear, drove him away, and he fled to an island in the lake of Bienné. Having in vain sought an asylum in Berne, he now went to Strasburg, and thence to Paris, where he arrived in great destitution, and became acquainted with Hume, the historian, then English *chargé d'affaires* there. Hume, out of sympathy and kindness, carried him to England and placed him in a comfortable situation there. Rousseau, however, who seems by this time actually to have become monomaniac on the subject of persecution, soon imagined that Hume was secretly attacking his reputation, wrote him an abusive letter, renounced a pension which he had secured for him from the English government, and returned to France. Here he wandered about the country for a year or two, busying himself with botanical studies, which he pursued eagerly and with success. It was during this period that he published his "*Dictionnaire de Musique*," rewritten from his articles in the "*Encyclopædia*;" a work, like all his writings, containing many acute observations and just remarks, but full of errors, and misleading in tendency; and during the same period it was that he united himself in marriage to Thérèse Levasseur, with whom he had lived since 1745.

In 1770, he obtained, through his friends, permission to come to Paris, where otherwise he would still have been liable to imprisonment under the sentence passed on account of "*Emile*." He was, however, obliged to promise not to write upon politics or religion, which he accordingly did not do; and was officially cautioned against publicity; which admonition he took pleasure in setting at defiance, and, contrary to his previous shy habits, he went much into society.

He was, however, now reduced to an excessively unhealthy mental condition, had become extremely rude and testy in manner, irritable and suspicious; his health was also failing, and he was falling into deep poverty. In 1778, the Marquis de Girardin invited him and his wife to occupy a small house near his country-seat of Ermenonville, some thirty miles from Paris. He accepted the invitation, but had been established there scarcely two months when he died from a stroke of apoplexy, July 3d, 1778.

ROUSSEAU'S EMILE.

THE *Emile* of Rousseau is not a system of pedagogy in the usual sense of the term. "My system," says Rousseau, "is nature's course of development." After a short general introduction, he discusses, in the first book, the management of new-born children, and, in particular, of *Emile*, up to the time when he learned to talk; the second book treats of his education from that time to his twelfth year; the third ends when he is fifteen; the fourth brings him to his marriage; and, in the fifth, are described *Sophia*, his wife, and her education.

The work is rendered still more different from a system, because it contains a large number of digressions upon subjects which have little or nothing to do with pedagogy. It would be a vain endeavor to attempt to bring it into a systematic form. I shall, therefore, follow the author, step by step, (except in the digressions,) and thus give a general view of his book. Rousseau's skill as a writer renders it difficult for the reader of *Emile* to estimate calmly his paradoxes, and to see through his sophistries. It is my hope that the following view may serve as a clear plan of this labyrinth of Rousseau's, and that the remarks which I have added may form a guide through it.

Preface.—The book, says the author, was originally written for a thoughtful mother. Even if the thoughts contained in it are of no value in themselves, they ought to serve to awaken valuable thoughts in others. Every body writes and cries out against the usual methods of instruction, but no one suggests a better one. The knowledge of our century serves much more for destroying than for building up.

Childhood is not understood. The most judicious, in their teaching, confine themselves to that which it is necessary for a man to know; without considering what children are fit to learn. They are always seeking for a man in the child, without ever thinking what the child is before it becomes a man.

My system is nature's course of development. This term will be mistaken by many of my readers. They will take my book to be, not a work upon education, but the dreams of a visionary. I do not see as others do; but can I give myself others' eyes? I can not change my views; I can only suspect them. It has been often said to me, Propose only what can be accomplished. This means, propose something which is done now; or, at least, something good, of such a kind that it will come into agreement with prevalent evils. Such a collocation would destroy the good without healing the bad. I would rather adhere entirely to what is already received than to try any half measures.

In order that the plans proposed may be well received and practicable, they must correspond with the nature of things; in the present case, for instance, the plan of education laid down must be adapted to human nature. A second work must consider accidental relations, such as the relations of man in certain countries or in certain conditions. I do not concern myself with such relations, but treat only of the education of the human being in itself.

As Rousseau, in his treatises upon the inequality of man, traces the progress of our race from the natural to the civilized, he proposes here an entirely similar problem. *Emile*, his pupil, is humanity personified, in the natural condition of childhood; a tutor teaches this child of nature naturally. He is afterward to come into a civilized

condition, into the relations of the present world; even to live in Paris, under Louis XV. Would not Emile, appear in such a position as a natural Don Quixote in the higher circles, as Rousseau himself appeared?

With received notions Rousseau had no intercourse; he sets up his educational principles, as something absolutely good, against the former, as something absolutely bad. Without reading further, we may here conclude that there is only one who has the right to say, "Put not new wine into old bottles."

Whether it is right to deal with the education of man, in the abstract, to discuss the personified idea of human childhood, instead of the education of a Frenchman or a German, of a townsman, farmer, etc., we shall inquire more particularly hereafter. At this time it will suffice to say that, in this, Rousseau contradicts himself. Emile, upon careful consideration, will be seen to be only a Frenchman *in puris naturalibus*, who, as he grows up, is adorned with a laced coat, peruke on head, and sword by side. Still it would have been beneficial, if Rousseau had, by this, reminded the French that they came into the world naked, and that naked they will go out.

FIRST BOOK. INTRODUCTION. FIRST YEAR OF EMILE'S LIFE.

1. Nature and Art.

All is good, as it comes from the hand of the Creator; all degenerates, under the hands of man. He forces one country to produce the fruits of another, one tree to bear that of another; he confounds climates, elements, and seasons; he mutilates his dog, his horse, his slave; turns every thing topsy-turvy, disfigures every thing; he will have nothing as nature made it, not even man himself; he must be trained like a managed horse; trimmed like a tree in a garden. If this does not happen, things turn out still worse; our race will not be satisfied with being half modified. Under present circumstances, a man who should live from birth upward, among others, and be entirely left to himself, would be deformed more than any other. Prejudice, authority, force, example, all the social influences which gather over us, could stifle nature in him, and set nothing in her place. He would be like the young tree which has grown up by chance in the street; it must soon be destroyed by the crowd of persons passing over it, who tread it down on all sides, and bend it in every direction. I turn to the fond and wise mother, who knows how to remove the child from the street, and to preserve the growing tree from contact with human opinions.

Bacon defines art, "*homo rebus additus*," by this we may understand that to man, as to the image of God, is given not only the dominion over nature, but also the charge of a sort of education of her, so that under his hands she may look more beautiful; even human. Rousseau, instead of honorable and divinely-intended art, sees, in his bitterness, only a caricature; only what depraved men have done to disfigure nature; and, at the same time puts forth such perversions as these, as most refreshing improvements. Would he prefer the crab tree to a Borsdorfer apple, as he does the ignorant savage man

to one of enlightened mind? The child would become, according to him, under the usual education, a caricature; it is the mother's duty to prevent this as far as possible. Education is her business much more than that of the father. In this Rousseau is a forerunner of Pestalozzi.

2. *Three Teachers. Education of Men and of Citizens.*

We come weak into the world, and need strength; bare of every thing, and need assistance. All which we have not at our birth, and have when we grow up, we acquire by education. This education we receive either from nature, from man, or from things. The inner development of our powers and organs is the education of nature; the use which we are taught to make of this development, is education by man; and what we learn by our own experience of the circumstances which have an influence upon us, the education by things.

We have no power over education by nature; and, therefore, we must shape both the other kinds of education by it. It is said: nature is nothing but habit. This is true so far as habit corresponds with nature, and is not forcibly and unnaturally constrained.

Born with perceptions, we seek or flee from things which are agreeable or disagreeable to us; which seem to promote or hinder our happiness and our improvement. Such desires and aversions, so far as they do not suffer variations through the actions or the opinions of others, are what we call nature. Every thing in education must be so related to these, that all three of the modes of education may constitute a harmonious whole. But nature and the conditions of citizenship are at variance in many ways; and it is necessary to determine whether we will educate a man or a citizen. Every partial society, as of one nation, &c., estranges from universal human society. Yet it is necessary, before all things, to deal rightly with those together with whom we live. Trust no cosmopolitan, who loves the Tartars, in order to be excused from the duty of loving his neighbors.

The natural man is complete within himself; his is the numerical unity; an absolute whole, which has relations only with itself, or with its like. The man of society is only a fraction, which depends upon its denominator, and whose value is determined by its relations to the whole; to the social body. Those modes of education are best for society, which are most efficient in perverting men from nature; in robbing him of his absolute existence, in giving him the relative one, such that after it he will feel and act only as a member of a society.

This opposition between education for a citizen and for a man, corresponds with the opposition between public education together, and private education in the family. The former existed in Sparta; but exists no longer, for there is no longer any fatherland, or any citizens.

Thus, there remains for us only private education, or that of nature. But what would the man educated only for himself become afterward, among others? To know this, it is necessary to know the completely educated man; and also the natural man. This book is intended to assist in gaining such knowledge.

What now is necessary to be done to educate the natural man? Much, no doubt; chiefly in order to hinder any thing from being done.

The child should be educated for the common human vocation, not for any special situation; he must merely live, in good or evil, as life should bring them; and should learn more by experience than by teaching. Considering the instability of human affairs, and the restless, rebellious spirit of the present century, which is overturning every thing, no more unnatural method of education could be devised than that which deals with a child as if he was never to leave home, or the companionship of his own friends. As soon as the unhappy pupil has gone a step away, he is lost.

Nothing is thought of but the support of a child; yet he must sometime die. Less care is taken to preserve him from death, than to contrive how he may live. But life is not merely breathing, but acting; the exertion of the organs, senses, faculties, all which gives us the feeling of our existence.

Thus far the introduction; partly in agreement with the preface.

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The more they are considered, the more misty and indefinite do many of Rousseau's ideas here appear; and especially the idea of nature. She must instruct men, since she develops their powers and limbs; and again, she is an instinctive; a more or less rational sympathy and antipathy.

What is the use of the expression, "Education of nature?" When, a seed is buried in the earth, and the plant develops itself and grows up, nobody calls this "nature's art of gardening." Art, on the contrary, is universally set in opposition to nature; and education is an art.

No one, who finds the basis of a well-ordered national life in a well-ordered domestic life, based upon family love, would set domestic instruction in violent opposition to that of the citizen; he would much rather consider it the only one from which good citizens can come; not citizens who see and criticise, in their kings and princes, mere employed agents, but who honor them as a power set over them by God. But is it to be wondered at that Rousseau, a contemporary of the wicked Regent, and of Louis XV., should speak thus, in pre-science of the coming revolution, which dissolved all sacred ties?

3. *New-born Children. Mothers' Nurses.*

Nurses shape the outside of the heads of children, and philosophers the inside; in this respect the Caribs are more skillful than we.

The swaddling of children is a most unnatural martyrdom; it hinders all the necessary movements of the limbs and of the blood. It is an invention of servants for the sake of convenience.

Mothers no longer nurse their children. Nurses share the children's love with the mothers, while they follow their pleasures. Here is the chief cause of the dissolution of all family relations, of all mutual love among members of a family; each one is thinking only of himself, and pursuing his own pleasure. And the influence of family life is the best antidote to bad morals.

Of quite opposite character is the effeminate spoiling of children by mothers. Nature does not treat children so; by teething and various other ways she causes them many pains, for the sake of hardening them. Why do they not imitate nature in this? Especially are young children managed worst. Either we do every thing they want, or require from them every thing we want; we are subjected to their whims, or they to ours. Thus the child commands before it can speak, or obeys before it can act; a child is trained into a being after our imagination, not into a natural man. If its peculiarities are to be preserved, the maintenance of them must be cared for from the moment of its birth until it grows up to be a man.

These remarks of Rousseau upon the duties of mothers, which are in agreement with Comenius, had a very good influence.

4. *Father.*

As the mother is the proper nurse of the child, the father is its proper teacher. The custom is, for him, not to have the necessary time; and thus children are placed in boarding-schools, seminaries, &c., where they are deprived of all love; and the scattered members of one family scarcely know each other. A heavy curse lies upon those who neglect their paternal duties.

Rousseau was thinking here of his own sins. How forcibly does he speak of the dissolution of family ties!

5. *The Tutor. The Pupil.*

The father who is otherwise occupied, must find a tutor. This tutor must be well educated and young; and, above all, he should not be employed for money; should be no hireling.* He must put himself into close relations with the pupil; must be his play-fellow; must remain with him from his birth to somewhere about his twenty-fifth year; must be his teacher and educator.

This pupil, Emile, is supposed not to have a particularly remarkable mind, but to be of good birth, rich, and an orphan. If his parents were alive, he should respect them, but should obey his tutor only. Tutor and pupil should look upon their relation with each other as indissoluble, in order that they may not become estranged from each other.

This pupil is supposed, also, to come from some country in the temperate zone, France for instance; and must be healthy. He (Rousseau,) could not be a waiter upon sick people, while tutor; he could not educate any child who should be a burden to himself or to others. The body must have power to obey the soul; the weaker it is, so much the more will it be faulty; and the stronger, so much the better will it obey.

Medicine makes us mean; if it cures the body, it destroys the courage. Moderation and bodily labor should supply the place of medicine. Doctors with their recipes, philosophers with their precepts, priests with their admonitions, make the heart faint; they are the cause why men forget death. By nature, man suffers patiently, and dies in peace.

Rousseau indicates clearly that such a tutor as he requires is not to be found, but if he was supposing such a one, why not rather a rich father like Pascal's, to devote all his time and powers to the education of his son? There would then have been no need of the chilling idea that Emile was to honor his parents, but to obey his tutor. The natural mutual love of father and child would have been a living motive of the whole course of instruction. But of such love nothing would be said by a man who sent his own children to the foundling hospital; or, if it is mentioned, it is never the heartfelt basis of his art of education.

Emile, it is clear from this description, is, by no means, an absolute, natural man, the personification of a child. His native country, climate, property, health, are all determined in advance.

The body is very well characterized, as the servant of the soul, but health is valued too highly, after the rude and Spartan manner. Rousseau would have thought the new-born juggler, who called himself the northern Hercules, well worthy of his instruction; not the new-born, weakly, seven months' child, the intellectual Hercules, Kepler. With characteristic exaggeration, Rousseau entirely rejects medicine, instead of giving some positive idea of it.

Had Rousseau seen a natural man die in peace, or did he feign this peace after the analogy of dying beasts?†

6. *First Instruction under the Tutor.*

If the mother does not nurse her child herself, the tutor must select a nurse,

* Rousseau declares himself unfit to be a tutor; and, in writing upon pedagogy, he describes, in his tutor, himself.

† In the second book of Emile it is said that savages, like beasts, struggle little at death, and suffer it almost without complaints.

go with her and the child into the country, and not remain in the city, which is unhealthy, by reason of the closely packed crowd of men.* Baths, and crawling about, are very good for children. We come into the world entirely ignorant, and with an incapable body, but with the capacity to learn.

The education of a child begins with its birth; and who can determine the limit to which it is possible for man to attain? By mere experience, without any instruction, a man will learn an incredible quantity in the first year of his life. If all human knowledge were to be divided into two parts, one common to all men, and the second peculiar to the learned, the latter would be very simple in comparison with the former; the former is, however, overlooked, because it is learned early, without knowing it, before we come to our understanding.

No habits should be taught to children, no regular hours for sleeping, eating, &c. He should be accustomed only to have no habits; should be trained to independence. And he should be suffered to acquire no fear of ill-looking animals, masks, reports of weapons, &c. Perception by the senses affords the first materials for childish knowledge; it is therefore important, that the impressions should be caused to occur to him in a suitable order. Especially he should be made to compare the impressions of sight with those of feeling. By moving they learn to recognize distances, so that they grasp no longer after distant things.

Rousseau's advice, to arrange methodically the first impressions upon the mind of the child, even before he can speak, has been followed repeatedly, and, as far as possible, by Basedow, Wolke, and even Pestalozzi!

Children speak, at first, in the universal natural language, which is not, it is true, articulate, but is extended, and intelligible. Nurses understand better than we do, and converse in this language with children; any words which they use in it are insignificant; their accent only being to be considered. These are assisted by the gestures and quick and varying pantomime of the children. Crying is their expression of hunger, heat, cold, &c. Their elders try to check and soothe this crying, but often misunderstand it, and try to silence them by coaxing or blows.

Children's first tears are requests; if attention is paid to them, they very soon begin to command. They begin with helping themselves, and with making others wait upon them.

All the bad conduct of children comes from weakness; make them strong and they will be good. He who can use all his faculties will not do ill.

Before we attain to understanding, there is no morality in our actions; "although expressions of it are sometimes seen in the sense which children show of what others do to them."

The destructive tendencies of children do not come from wickedness, but from an evident desire for activity. Their weakness prevents the greater evils which they might do. They very soon seek to make instruments of their elders; to make these repair the harm which their weakness has caused. Thus they become vile tyrants, and there is developed in them ambition, which they had not originally, but which they retain all the rest of their lives.

These strange and false assertions,—and we shall find many more such,—are meant to delineate the inborn innocence of children. Rousseau meant that it should follow, that all evil comes into men from without. And evil, whose source is untraceable, is not bad; is not sour, but sweet. How opposed is Augustine to Rousseau! "Can there be," asks the former, "any good in a child, when he cries for what could only hurt him if he got it? When he gets into a violent rage at grown-up people who are not under his authority, and even

* "Man's breath is fatal to his like. This is true, both figuratively and literally. Cities are the charnel house of the human race."

at his own parents; when he tries to injure, by blows, those wiser than he, if they do not obey him at the moment? it is the weakness of the limbs of infants, not their minds, that is innocent." *

Children, (to return to Rousseau,) must be helped where it is necessary, but their faults are not to be attended to, and they must be left to help themselves as much as possible.

The needless crying of children will be best quieted by paying no attention to it; for even a child does not willingly exert himself for nothing. Crying can be stopped by turning the child's attention to some striking object, without letting him see that that is what is meant.

Children should be weaned when the teeth come.

Expensive playthings are superfluous; cheap and simple ones are sufficient.

Children hear talking before they understand it or can speak themselves. Nurses may sing to them, but should not be continually talking before them what they do not understand. Some easy words should be repeatedly spoken before them; words which mean things, and the things should be shown at the same time. The unfortunately easy habit of being satisfied with words which we do not understand, begins earlier than we think; before school age. The vocabulary of children should be as simple as possible; they should have no more words than ideas. Children have their own grammar. Their syntax has rules more general than ours; and follows remarkably certain analogies, which are not, however, always recognized by them. Thus, *e. g.*, a child says, *irai-je-t-y?* after the analogy of *vas-y*. Errors of children's language should not be pedantically corrected; they will disappear of themselves with time; only always speak correctly before them.

It is a great mistake to take so much pains to make children speak so early; for by these very means they get a knowledge of language more slowly and confusedly.

The children of laborers speak more distinctly than the distorted children of the rich. The recitations in the schools improve the delivery so little that the boys are in the habit of making use of learning by rote, and gabbling over what is to be recited; and in the recitation they hesitate and stammer, whenever their memories fail.

Children who are made to speak too soon, have not time enough to become acquainted with what they are made to talk about, and acquire wrong impressions of it. A child ought not to speak any further than he can think. A great fault is an accentless, expressionless, feelingless, way of speaking. The expression is truer than the words; and perhaps this is the reason why well-bred people are so much afraid of the former, and why they speak, all of them, in the same tone; or they fall into a ridiculous, affected, modish accent, such as is so disagreeable in a Frenchman.

Many of these views of Rousseau upon the instruction of the earliest childhood have deservedly found approval, although here and there approaching to extravagance, especially in this; that he would have French and German children, &c., managed like young savages, while the whole course of their life is still unvariedly French. Young princes are to go barefoot. In requiring that children should talk no further than they can think, Rousseau coincides with Comenius.

SECOND BOOK. EMILE'S CHILDHOOD TO HIS TWELFTH YEAR.

7. *Unnecessary Sympathy. Unnecessary Teaching. Sacrifices of the Present to the Future.*

A new period of life begins with speech, which replaces much crying. Unnecessary sympathy should not be shown for the griefs of children; they should learn to bear them.

They should be taught nothing which they will learn themselves; walking, for

instance. Leading strings and other such helps are useless; let them fall and get up again, on some soft meadow, a hundred times. With the powers of children there grows up in them the capacity for managing those powers; and, by this means, the self-conscious, individual being. Life becomes a unity by memory; and thenceforward children must be treated as moral beings. Ignorant teachers make the children miserable, by not regarding the present time of childhood, and by only considering the child's future; to which perhaps he may never attain. Childhood, it is said, is the time when evil tendencies can most easily be remedied. Is your knowledge then certain, that this fine teaching of yours will, in future, insure the happiness of the child; And what is happiness? He is happiest who suffers least; and he unhappiest who enjoys least pleasure. Do not the evil tendencies come rather from your mistaken pains, than from nature? Let the child be only a child.

Rousseau is right in opposing the useless teaching of what the child will learn of himself; such teaching as is found in too many of our elementary schools. His rejection of the belief that punishment operates against evil in children, follows from his disbelief in original sin.

8. *Dependence of Children instead of Obedience.*

He who is truly free wishes only for what is attainable; and thus does only what pleases him. This principle should be applied to children.

The child should feel his weakness, but should not suffer under it; he must be dependent, but obedient; he must ask, but not command. He enjoys an incomplete freedom.

There is a dependence upon things, based in nature; and a dependence upon man, based in the social state. The former has nothing to do with morals, and therefore does not interfere with freedom; the other is a source of vice. The child should be kept in a material dependence only; physical hindrances, that is, such punishments as have their origin in his own actions, should be opposed to his assumptions. Experience and weakness must be his laws.

In what nature requires for the development of the body, the utmost possible freedom should be permitted to children, as in running, jumping, &c. But if they demand any thing which must be done for them by others, great care should be taken to distinguish whether it is a real necessity, or a whim, which occasions their demand.

No attention should be paid to the perverse crying of children; and, on the other hand, they should be taught not to issue commands in courtly forms of speech. The "If you please," of the children of the rich, means only "I please;" and "I beg," only "I command." It is better that the child should say, without circumlocution, "Do this."

If every thing is given to the child which he demands, his requirements will have no limit; only God himself could satisfy them. By such granting, also, children's covetousness and love of power are cultivated; and they will be made very miserable when, as must sooner or later be the case, they receive refusals.

Capricious tyrannizing over their elders is as little suitable for children as giving commands. Your child should not have any thing merely because he asks for it, but only because it is necessary for him; he must do nothing from obedience, but only from necessity; the words "obey" and "command" should be stricken out from his dictionary; and still more the words "obligation" and "duty;" but the words "power," and "necessity," and "weakness," and "force," must be the principal ones in his vocabulary. Until the child comes to his understanding he can understand nothing of moral existence or social relations; and for this reason words which refer to them should be avoided, and the child should be restricted entirely to the physical world.

Rousseau's vocabulary wants the most important word of all, love,—thankful love; and, therefore, in the place of obedience, which is in essence the same with love, must be but a hard, heartless, material

necessity. How different is the theory of Pestalozzi! Rousseau's observation is an acute one, that children pervert the forms of request into commands; his warning is very just, against the unlimited giving to them of every thing they desire.

9. *Reasoning with Children.*

Locke's maxim is now universally followed; that children should be reasoned with. But the results do not speak in favor of the practice; no children are sillier than those who have been much reasoned with. Of all the faculties, the understanding is developed the latest; and yet it is overstrained to make it help in developing the others. This is beginning at the end. If children understood reasoning, they would need no education; the stating to them, from an early period, what they do not understand, accustoms them to be satisfied with mere words, and to practise every thing which is said to them, to think themselves as wise as their teachers, to be disputatious and perverse, and to do what they are supposed to do from reasonable considerations, only from covetousness or fear or vanity, which are the motives which are of necessity added to those of reason.

Let children be children. If we choose to reverse the order of things, we shall get premature and flavorless fruits, which soon decay; we shall have young doctors and old children. We might as well expect children to be five feet high, as to have judgment in their tenth year.

In trying to convince children of the duty of obedience, force and threats are used, or, what is still worse, flattery and promises. Thus they pretend to be convinced by reason, when they are baited by self-interest, or driven by force. You think you have convinced them, when you have only wearied or frightened them. Thus you accustom them to conceal their real motives behind pretended ones, and to make sport of you. With children exhibit strength, and not authority, which is a motive for men. Give to them willingly, and refuse them unwillingly; but let what you refuse be irrevocably refused, and let no importunity induce you to withdraw your "No." Here there is no medium; either you must require absolutely nothing from the child, or you must force him, without ceremony, to the most implicit obedience. The very worst education is that in which you leave the child in uncertainty between your will and his own, and dispute with him without end which of you shall be master. A hundred times better is it that the child should be master, once for all.

Exceedingly important truth.

10. *Against Jesuitical Means of Education.*

Ever since children have been instructed, no other means have been invented of managing them, but emulation, energy, jealousy, covetousness, and debased fear; those easily excited, most dangerous and soul-destroying passions. At every injudicious lesson, you plant a vice deep within the heart. Foolish teachers think they have done wonders, when they have made the children bad, in order to communicate to them the idea of goodness. Then they say gravely, "Such is human nature." Such is your discipline, rather.

The continual presence of your tutors constrains children; when their backs are turned they make up for it by playing roguish tricks.

Very true.

11. *Against Original Sin.*

There is no original depravity in the human heart; there is not one single vice in the heart, of which it can not be told how, and by what road, it came in thither. The only inborn passion is self-love, which is, by nature, good.

The child can do many bad things without being bad; that is, without the purpose of doing harm. If he should once have such a purpose, he would be almost hopelessly bad.*

12. *Negative Instruction to the Twelfth Year.*

The usual education of children is such as if children leaped, at one bound,

*On this point I refer to the introduction.

from the mother's breast to the age of reason. An entirely opposite method is the necessary one; an entirely negative one; which does not teach virtue and truth, but seeks to preserve the heart from vices, and the understanding from error. If you can bring your pupil to his twelfth year healthy and strong, even if he could not distinguish his right hand from his left, the eyes of his understanding would open to your first lesson in reason; for he would have no prejudices, habits, or any thing to stand in the way of the efficacy of your efforts. He would soon become, under your hands, the wisest of men; and although you began with doing nothing, you would have accomplished a wonder of education.

Do the opposite of what is usual and you will almost always do right.

From the effort to make the child not a child, but a doctor, come the multiplied fault-findings, flatteries, threats, and reasonings of fathers and teachers. Be reasonable enough not to reason with your pupil. Make him practice his body, his limbs, his senses, his faculties; but keep his soul as inactive as possible, let the character of childhood ripen in the child. By such delay you gain time to learn the gradually developing character of your pupil, before you undertake to guide it, and make precipitate mistakes.

Rousseau rightly opposes the unwise endeavor to give a child the wisdom of an adult, as early as possible; in preferring rather to teach nothing, than to use such inappropriate means. There is, however, a positive course of discipline of which Rousseau, as we shall see, knows nothing, and refuses to know any thing.

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13. *Education in the Country.*

It is difficult, almost impossible, entirely to protect the child against bad influences; but best in the country. The teacher must here endeavor to gain the love of the neighborhood, and thus to secure its favorable influences upon his pupil.

14. *Judicial Instruction.*

It is unnatural to speak to children of their duties, and not of their rights; since the first idea of right comes to children, not from what they are bound to do, but from what others are bound to do for them.

The idea of property is first communicated to children by some means more effectual than mere explanations.

Nothing is said about love.

15. *Moral and Religious Education.*

The teacher is to blame for all the lies of children. Why does he make so many promises, and make so many inquiries, when any thing has happened?

If children are to be made pious, they are taken to church, where they get tired. By making them say over interminable prayers, they are made to long for the happiness of not being obliged to pray to God any more. To teach them benevolence, they are made to give alms; as if their teachers were ashamed to give them themselves. It is not the child, but the teacher, who should give. And what is the child made to give? Money; which has no value to him; or something which is always made up to him again. Locke's advice is, so to arrange matters that the children shall observe, for themselves, that those who give freely fare the best. That is to educate, apparently to generosity, but in reality to avarice.

The only moral instruction proper for children is, to do nothing bad. To this end they must be isolated as much as possible, since, in the social state, the good of one is, by necessity, the evil of another.

Children can not possibly become perverse, mean, false, and greedy, unless others have sown the seeds of these vices in their hearts.

What a frightful load of sins against children does Rousseau pile upon the souls of all parents and teachers merely to carry out his

mistaken doctrine of the non-existence of original sin! After his sophistical fashion, he gives his assertion the appearance of truth, by assuming that the teacher proceeds entirely wrongly, or in a most vexatious manner.

16. *Forming Opinions about Children.*

Real weakness of intellect is difficult to distinguish from that apparent weakness which indicates a powerful mind. The really stupid child is unfit for any thing; the apparently so, seems to be. Accordingly, do not form opinions about children too easily; let nature operate a long time before you venture to step into her place. The facility with which children learn is only apparent; they only retain words which they do not understand.

Very

17. *Conceptions. Ideas.*

Conceptions are only the absolute pictures of natural objects; ideas are notions of such objects, determined by their relations. A conception may be entirely alone in the mind; but every idea supposes other ideas. By conceiving, we see; by ideas, we compare. For mental impressions, we only hold ourselves passive; while, on the contrary, our ideas spring from the active originating principle. Before the child arrives at his understanding, he receives only impressions, such as sounds, &c.; he does not originate ideas in himself, and retain them. He is incapable of judgment, and has no real memory.

18. *Words. Learning Language.*

The pedagogues teach children words, nothing but words, and no real knowledge.

What has been said I do not believe; that even one child, such as are called remarkable children, ever actually learned two languages, before his twelfth or fifteenth year. For each language has its own peculiar spirit, and the thoughts take the color of the idiom.

Until the child comes to its understanding, it has only its mother tongue. In order to be master of two languages, it must be able to compare ideas.

But, it may be answered, there have been children who have spoken five or six languages. But how did they speak them? the German child, for instance, speaks German-French, or German-Italian; so that, although its words were not German, its language was.

The old languages are dead. The imitation of what is found in the Latin classics, is called speaking Latin. Boys are made to translate French into Latin words, and afterward to patch together phrases from Cicero and verses from Virgil. Then the teachers think their scholars can speak Latin; and where are the people to contradict them?

The German boy, who speaks Latin, usually says something in German-Latin, or nothing, in Latin verses learned by rote.

Comenius had already zealously opposed the teaching of mere words without any real basis; the continual employment of scholars in the world of conceptions, the world of language, without concerning themselves, in the least, with the original things.

19. *Geographical Instruction.*

In any science, a knowledge of representations, without that of the things represented, is of no value. In the instruction of children, however, such representations are adhered to. Thus, in geography, maps are shown, and the names of countries, places, &c., are taught, when, for the child, they only exist on the paper. A geographical manual began with the questions, "What is the world?" An answer once given was: "A ball of pasteboard." After two years of the usual instruction in geography, a scholar could not, by the rules given, find his way to St. Denis in Paris; or find his way in his own father's garden, with a plan.

And these are the doctors who have knowledge enough about Pekin, Ispahan, Mexico, and all the countries of the earth.

20. *Instruction in History.*

Of the historical matters taught, the scholars do not perceive the manner and connection. When Alexander drank the medicine of his physician who was accused of treachery to him, a boy wondered at him, because he could swallow down such unpleasantly tasting stuff at one draught. So injudiciously has the matter been managed by the learned.

21. *Learning by Rote.*

Children should not learn by rote; not even La Fontaine's fables, which, in spite of their apparent simplicity, no children understand, or if they do, so much the worse.

22. *Learning to Read.*

Reading is the great misery of children. Emile must, in his ~~twelfth~~ year, scarcely know what a book is. How many artificial methods have been invented for facilitating learning to read! The most important means to this end is, that the teacher awaken an interest in the subject, in his scholars. The less he urges and forces his pupils toward any object, the more certain will he be to attain it; and, while it is of little consequence whether a boy can read before his fifteenth year, he may perhaps be able both to write and read, as early as his tenth.

The anxious and foolish apprehensions of parents, lest their children shall not learn to read soon enough, seem to be growing in our times, every year.

23. *Education for the Present.*

If you follow rules entirely opposed to the usual ones, if you take pains to make your pupil always collected in mind and attentive to what concerns him, instead of keeping him forever busy in other climates and other times, even at the ends of the earth, and even in the heavens, you will find him afterward fitted to understand, to retain in his memory, and even to reason; for such is the course of nature.

Is this life in the present, one after the manner of the ancient Greeks, or after that of the Caribs?

24. *Bodily Training.*

Exercise the body of the pupil in every way. It is a pitiable error to suppose that this will interfere with that of the mind. Only let the pupil grow up without being kept in leading-strings and tutored at every step; let him be obliged to act and advise for himself, and he will exercise mind and body at the same time. It is in this manner that free savages exercise their bodies; and not servile laborers. Let the pupil combine the understanding of a wise man with the strength of an athlete!

"Free savages," "athletes,"—words worthy of consideration.

25. *Rules for the Conduct of the Tutor.*

It is a difficult art to manage the pupil without constant orders, and to do every thing as if one were doing nothing.

A child usually reads the mind of the teacher much more easily than does the teacher the child's; so that the child usually has the advantage of the teacher here.

Govern so that the child shall think itself free, and shall not be stimulated to search for your weaknesses and watch you.

The caprices of children are mostly the result of a mistaken education; of their being permitted to command as they wish, and being obeyed.

Truths which Rousseau seems to have taken from his own experience; for he was a tutor.

26. *The Body a Medium for Educating the Mind. Hardening.*

What the human receives is conveyed through the senses; the senses are the

basis of the intellectual ; our feet, our hands, our eyes, first teach us philosophy. For this reason we must train the members and senses as the instruments of our intellect, and for this reason the body must be sound and strong. Gymnastics gave to the ancients that strength of body, in which they so remarkably excelled the moderns.

Loose clothing should be given children, in which they may feel free and at ease. Even in winter they should wear summer clothing ; they should have no covering for the head, and should drink cold water even when they are hot.— They should not sleep in a soft bed. It is more important to be able to swim than to ride.

Rousseau praises Locke's method of hardening children's bodies, except that he rejects his cautions against drinking and lying on the damp ground, when the child is hot. His hatred of French effeminacy, and his admiration of the Carib mode of hardening the body, make him push every thing to exaggeration.

27. *Education of the Senses. Feeling.*

The senses develop themselves earliest in children ; and therefore the attention should be first turned toward completing that development. But this is what most persons forget or neglect. Train not only the active powers of children, but all the senses which regulate those powers. Benefit each sense as much as possible ; and prove the impression made upon one sense by that upon another. Let the pupil measure, count, weigh, and compare. The blind have the most acute touch ; seeing children could cultivate the same by practice and plays in the dark ; by which those fears which the activity of the imagination occasions in the dark, would be removed.

The tips of the fingers should be fine skinned and susceptible ; many things can be known more clearly and certainly by the touch than by the eye. On the contrary the soles of the feet should be hardened by going barefoot.

Rousseau is quite right in laying stress upon the training of the senses. But he does it in such a manner that he seems to be showing how to train a Carib child for the exact sciences of the French, or a French child for the life of a savage. Nothing is said of the education of the eyes for the beautiful ; as nothing is said anywhere of the beautiful, but only of the useful.

28. *Seeing. Drawing and Geometry.*

The vision often errs by reason of its wide field of operations and the multitude of objects which it embraces ; which render it liable to hasty judgments. The illusions of perspective are indispensable for the measurement of distances ; without the gradations of size and light, we could measure no distances, or rather there would be none to us. If a large tree one hundred paces distant, seemed as large and distinct as another only ten paces distant, it would appear to us that they stood together. If two objects appeared to us of their actual size, we should have no knowledge of places.

The size of the angle at the eye, at which we see objects, is determined by their size and distance. But how shall we distinguish, when one object appears smaller to us than another, whether this is by reason of its real size, or of its greater distance ?

Children must be practiced in estimating sizes and distances, as architects, field surveyors, &c., are. Without feeling, without movement, with measuring, the best of eyes can give us no idea of room. For the oyster, the universe is a point. With this exercise of children in estimating distances, is connected drawing, which depends entirely upon the laws of perspective. They should not however use copies, but should draw from nature ; and in this it is of more importance that they see and understand correctly, than that they should draw artistically.

Geometry, like drawing, is for children an exercise of the eye, based upon see-

ing. Make correct figures, put them together, place one upon the other, and prove their relations. By proceeding from observation to observation, you will go on through the whole of elementary geometry, without seeing any thing of definitions or problems, or of any other form of demonstration, except that of superimposition.

Correctness in diagrams is usually neglected; the figure is shown, and the demonstration given. But it would be of much more value to draw lines as straight, correct, and similar as possible, and squares and circles as true as possible.

In Turin, they gave a boy cakes of the same size, but of the most various shapes; he tried every possible means to determine which form held the most.

Children's plays should exercise their eyes, and all their members. How much can be accomplished in this direction is shown by the feats of rope-dancers. Is there any children's diversion which the instructor can not make instructive to them?

What Rousseau here says of teaching geometry is worthy of special consideration. From real pure geometrical drawings there are developed true and pure geometrical ideas.

29. *Hearing. Speaking and Singing.*

The child should compare such impressions on the sight and hearing as belong together; as, for instance, that the lightning is seen before the thunder is heard. The voice, as an active organ, corresponds with the passive one of the hearing; and they assist each other.

The pupil should speak in a plain manner. He should not be permitted to declaim; he should have too much sound sense to express, with tones and feelings which he has not, things which he does not understand. Teach him to speak distinctly, without hesitation, without affectation, and loud enough to be understood; teach him to sing correctly and in tune, but no operatic music; train his ear for time and harmony.

Rousseau's musical faculty made him forget his Iroquois ideal; and he does not ask the question, what is the use of music?

30. *The Taste.*

In the beginning, that nourishment was most healthful for simple men which tasted best. In children this primitive taste should be preserved as much as possible; their food should be common and simple, not high seasoned; flesh is improper for them. Of the proper food they should be permitted to eat as much as they wish. Eating is the passion of children. Therefore they should be managed by means of their palate; this natural and appropriate motive is far preferable to those of vanity. Love of eating will decrease and vanity will increase with years.

31. *The Smell.*

This is related to the taste, as sight is to feeling. In children it is not very active.

32. *The Common Sense. Formation of Ideas.**

A sixth sense comes from a proper employment of the other senses; namely: "the common sense." This is resident in the brain; and its sensations are called perceptions, or ideas. (?) The number of these ideas indicates the extent of our knowledge; and the power of comparing them with each other is called human reason. The sensitive, or child's reason, forms simple ideas, by bringing together several impressions upon the senses; the intellectual reason forms compound ideas from several simple ones.

33. *Character of Emile, at Twelve Years Old.*

His exterior indicates self-possession and ease; he speaks with simplicity, and does not talk unnecessarily. His ideas are confined and clear; he knows nothing by rote, but much by experience. If he does not read so well in books, he reads

* Sec. 17, 42.

better in the book of nature; he has less memory than power of judgment; he speaks but one language, but understands what he says. If he does not speak so well as others, he is much more capable of doing. He knows nothing of routine, custom, or habit; and what he did yesterday does not indicate what he will do to-day. Neither authority nor example impose upon him; he does and says only what seems good to him. He knows nothing of study, speech, or manners; but his language corresponds with his ideas, and his behavior arises from his wishes.

He has few moral ideas, but they are such as correspond to his age. Speak to him of duty or obedience, he does not know what you mean; order him, he does not understand you; but say to him, if you will do this to please me, I will sometime do something to please you, and he will instantly exert himself to comply with your wish; for nothing will please him more than to add to his legitimate influence over you, which he holds inviolable.

If he needs help himself, he makes use of the first that comes to hand, whether it be a king or a servant; for all men are alike to his sight. He shows to him whom he asks, that he does not consider any one bound to grant his request. He is simple and laconic in his expressions, and neither servile nor arrogant. Grant his request, and he does not thank you, but feels that he is your debtor; refuse it, and he does not complain nor urge you, but lets the matter drop.

Lively, active, he undertakes nothing too great for his powers, but which he has tried and understands. He has an observing and intelligent eye; and asks no useless questions about what he sees, but examines it himself. As his imagination is yet inactive, and nothing has been done to stimulate it, he sees only what really exists, does not over-estimate danger, and is always cool.

Business and play are the same to him, his play is his business; he finds no difference between them. Among city children, there is none more dexterous than he, and all are weaker; he is equal to country children in strength, and surpasses them in dexterity. He is fit to lead his companions, by his talent and experience, without any other authority, without wishing to command; he is at the head of the rest, and they obey him without knowing it.

He is a mature child, and has lived a child's life; his happiness has not been exchanged for his education. If he dies young, his death is to be mourned, but not his life.

Ordinary men would not understand a boy so trained; they would see in him nothing but a scapegrace. A teacher could make no parade with him, could ask him no show questions; and those are the chief of the education of the day.

A healthy, strong, dexterous, corporeally well-trained boy, systematically educated, for a purely earthly existence, and for cold independence; a Frenchified Carib, or Caribized French boy, without fancy, poetry, love, or God.

THIRD BOOK. EMILE, FROM HIS TWELFTH TO HIS FIFTEENTH YEAR.

34. *Desire of Knowledge. Methods. Regard for Authority.*

Curiosity will now begin to operate, and will henceforth stimulate the boy. With natural curiosity is connected the vain endeavor to appear learned. Impressions upon the senses must be developed into ideas; only, we should not pass too suddenly from material to intellectual objects. The world and things in books must be the teachers; mere words should not be learned.

The pupil knows nothing because you have said it to him, but because he has comprehended it; he does not learn his acquirements; he discovers them. If once you give him authority, instead of reason, he will no longer think for himself, but will be the sport of strange opinions.

One extreme introduces another. Because ^{earlier} earlier, ignorant, and harsh teachers treated boys like empty vessels, which they were to fill up with Latin vocables, geometrical demonstrations, &c., therefore, according to Rousseau, now they must find out every thing for themselves; because earlier tyrannical teachers based every thing on author-

ity maintained by force, now all at once there is to be no authority at all. From the pedagogical age of Louis XIV., we are to be transferred at once into the age of the revolution.

Woe to the boy to whom no authority is sacred; who is destitute of all reverence and love toward his parents and teachers.

35. *Rudiments of Astronomy.*

A beautiful sunrise. The teacher is in an ecstasy; but the boy of thirteen is not yet ready to take pleasure in a beautiful spring morning. It would be foolish for the teacher to take pains to talk the pupil into his own enthusiasm.

No writings are proper for a boy, no eloquence or poetry; he has no business with feeling or taste. Be to him clear, simple, and cold; direct his attention to the places of the rising and the setting of the sun, and let him wonder how it gets back from the west to the east. The observation that it passes from the east to west every day will suggest an answer. Again, draw his attention to the change of the place of sunrise and sunset at different seasons of the year. All this must be done without any armillary sphere; its circles confuse the pupil.

Either, according to Rousseau, we must boil over with pseudo-poetry, at a beautiful sunrise, or—as he recommends before the boy of twelve—freeze with astronomical observations. Is there no medium?

36. *Rudiments of Geography and Physics. Methods.*

Geographical instruction should begin with the house and place of abode. The pupil should draw maps of the neighborhood, to learn how they are made, and what they show.

It is of less importance to teach the boy sciences, than to give him a taste for them, and methods for learning them when that taste shall have been more developed. At this age, also, he should be taught to follow up one subject with persevering attention, but yet not to weariness. If he asks questions for his own information, answer him just so much as is necessary, in order to stimulate his curiosity; but do not let him weary you with endless silly questions. Philosophy develops the sciences from their principles; but instruction does not. In this, each subject explains and introduces another, and thus curiosity keeps alive the attention.

If the pupil has found out the noon-mark, by a shadow, and drawn it, show him that the compass will give him the same line.

Instruction in physics should begin with the simplest experiments, not with instruments. These must follow after such experiments; and, though ever so imperfect, should be constructed by the teacher and the pupil, themselves. By such independent efforts are attained ideas of greater clearness and certainty.

The numerous instruments which have been invented to guide us in experiments, and to make up for the defective accuracy of the senses, are the reason why the senses are less used. The more perfect our tools are, the more blunt and inefficient will our organs become.

Purely speculative knowledge is not for children; not even when they approach the age of youth. Yet it must be contrived that their experiments shall form a chain, by the aid of which they may be better retained in the memory; for facts and demonstrations entirely isolated do not remain there.

In investigating nature's laws, begin always with the more common and obvious phenomenon.

This is a most valuable observation upon elementary instruction in the natural sciences. Comenius already, and Pestalozzi afterward, commenced the study of Geography with the immediate neighborhood. Any bright boy will, however, make himself acquainted with it, if he is permitted, without taking wearisome topographical walks with his

teacher. Nothing should be taught which the boy will freely learn himself, without any assistance. Rousseau's tutor, always teaching the boys something in every trip, and even in every game, would necessarily become intolerable to them.

37. *No Authority.*

The boy should do nothing at the word; nothing is good to him except what he himself recognizes as good. By your wisdom you rob him of his mother-wit; he becomes accustomed always to be led, and to be only a machine in the hands of others. To require obedience of the child, means to require that, when grown up, he shall be credulous; shall be made a fool of. It is of no use to say to the boy that he is ordered for his own good, and that, when he is grown up, he will see it. To do so is to play into the hands of every visionary charlatan and impostor, who shall in after life desire to entangle the boy in his nets.*

38. *Against premature Learning. "What is the Use?"*

The child should learn what is necessary for his own age; and not, prematurely, what will be necessary in after years. But, you say, can what is necessary be learned, at the moment when it is to be applied? I answer, I know not; but this I know, that it can not be learned before; for our real teachers are experience and feeling; we only learn what is right in the experiences of actual life. When we have given the pupil the idea of usefulness, we have thus a new mode of guiding him; he sees that this word is related to his present well-being. "What is the use of it?" is the sacred question, the word which must decide every thing between the teacher and the scholar; it is the question with which the former can answer the host of useless questions of the latter, and which he again can, upon occasion, put to the teacher.

There are harmful anticipations in learning, but there are also necessary ones. Seeds may be planted in the child's mind which shall sleep for years as if dead, but which shall spring into life at the right moment. Old men encourage themselves, in the hour of death, with verses from the funeral hymns which they learned when children.

39. *Strengthening the Weak. Laconicism. Vanity as a Motive.*

Who is the teacher who can confess to the scholar that he has erred? If the teacher has no answer at hand to the scholar's question, he should say so without more ado.

Above all, avoid tedious explanations, which are often made by teachers, only with a view to show themselves off to visitors who may be present.

Adhere to facts. We lay too much stress upon words; and our talking education trains up talkers. A boy who is lost will find out better how to set himself right by the sun, than he would by a long demonstration. Wherever possible, teach by things themselves.

What the boy learns only through an appeal to his vanity, he had better not learn at all.

Very true.

40. *Books. Robinson Crusoe. Workshops.*

From books men learn to talk about what they do not understand. But there is one book which may be considered as a most valuable treatise upon natural education; a book which might, for a long time, constitute the entire library of the pupil; namely, Robinson Crusoe. Robinson, alone upon an island, obliged himself to make every thing necessary to him, becomes the boy's ideal; he will ask only for what would be necessary for him upon a Robinson's island.

The teacher should frequent workshops, with his pupil, and should permit him to take hold of the work himself; and by this means he will learn to understand

* See 34.

them better than by many explanations. He will learn at the same time to value more highly really useful artisans, than the so-called artists, who are so much esteemed by the world. He will esteem more highly a locksmith than a goldsmith; engravers and gilders will be, in his eyes, only idlers, busy in useless amusements; even watchmakers will be of small account with him. He will respect all human labor, and in like manner all productions of nature, in proportion as they contribute more to his necessities, his knowledge, and his comfort. He will value iron more highly than gold, glass than diamonds.

It is not meant that the pupil should become acquainted with every trade, but only that he should know the most necessary ones, and their connection with each other.

Here it appears more clearly what Rousseau means by his question, What is the use? He barbarously only values what is necessary for human subsistence, to a life as nearly as possible to that of a beast. Watchmakers would be of but little account with him; he does not even mention the higher arts, the fine arts, so useless do they seem to him.

41. *Equality. Revolution. Learning and Trade.*

Your education of men should be adapted to what they are in themselves; not to any thing external. By training him exclusively for one condition, you make him unfit for any other, and unfortunate, if his situation should ever change. How ridiculous is a great lord who has become a beggar, and who holds in his misery to the prejudices of his birth; how contemptible the rich man become poor, who feels himself completely degraded!

You acquiesce in the social order of the present, without considering that this order is subject to unavoidable changes; and that it is impossible for you to foresee or to prevent the revolution which may come upon your children. The great will become small, the rich poor, the monarch a subject. We are approaching a crisis; the century of revolutions. It is impossible that the great monarchies of Europe can last long. And who can say what shall then happen to you? What men have made, men can destroy; only the character given by nature is indestructible; and nature makes neither princes, nor rich men, nor great lords. What will the satrap do in his debasement, who has been educated only for his high position? What will the farmer-general do, in his poverty, who lives only upon his money? Happy will he be, then, who shall understand how to leave the condition which has left him, and to remain a man in spite of fate. The cultivation of the earth is the best of all employments; yet, when evil times come, the artisan is more independent. Make your son, therefore, learn some respectable trade, the carpenter's for example. This will also serve to cure him of the prejudices against trades. Only beware of nourishing one vanity while you are exerting yourself to oppose another.

The great secret of education is, to manage it so that the training of the mind and body shall serve to assist each other.

Here Rousseau foretells the revolution almost thirty years before its coming. As a great architect outlines the church whose form stands before his mind, before even the corner-stone is laid, so the great master of destruction draws the picture of horrors and dissolution before the soul, before the multitude taught by him put hand to the work.

42. *Impressions upon the Senses. Ideas. Opinions.**

After the body and senses of the pupil have first been educated, we should train his understanding and his judgment. Lastly, we should teach him to use his brains in the service of his faculties. We have made of him an acting, think-

* Comp. 32, 17.

ing being; to make him a complete man, we must make him also a living and feeling being, that is, we must supplement reason with his feelings.

As at first the pupil has only sensations, so now he has ideas and forms judgments. By the comparison of several of these, following each other all at the same time, and by a judgment upon them, there results a sort of compound impressions which I call ideas. In simple impressions upon the senses, the judgment is merely passive; it only makes certain of the actuality of the sensations; in perception, or the idea, it is active, placing together, comparing and determining relations which the senses do not determine.

The judgment leads to error, particularly in the case of learned men, whose vain desire to shine by giving opinions outruns their knowledge. Ignorance, which says "What have I to do with it?" is the only safety from error. Thus speak savages and wise men. Our pupil must not speak so; he is a savage, but destined to live in cities.

We learn best to judge by laboring to simplify our experience, and, having acquired experience, by seeking rather to avoid error than a positive knowledge of the truth; and by rather confessing ignorance, than by endeavoring to explain any thing insufficiently.

43. *Emile in his Fifteenth Year.*

Being obliged to learn by means of himself, he uses his own understanding, not that of other men; and yields nothing to authority. For most of our errors come less from ourselves than from others. By this continual practice, his mind has acquired a strength like that which is given to the body by labor and hardship. For the same reason his powers develop themselves only in proportion to his growth. He remembers only what has commended itself to his understanding. Thus he has little knowledge, but no half-knowledge. He knows that his knowledge is not great; his mind is open, decided, and, if not instructed, at least capable of instruction. Of all that he does he knows the use, and of all he believes, the reason. He proceeds slowly, but thoroughly. He possesses only natural knowledge; none of history, and none of mathematics and ethics. He knows little of generalizing and forming abstractions; he observes properties common to many bodies, without reasoning upon the existence of these properties. What is strange to him he values only by its relations to himself, but this valuation is sufficient and certain. What is most useful to him he values most, and cares nothing for opinion.

Emile is laborious, moderate, patient, persevering, and courageous. His fancy, not heated in any way, never magnifies danger; he can endure sorrow with fortitude, for he has not been trained to oppose himself to fate. What death is, he does not rightly know, but, being accustomed to submit without resistance to the laws of necessity, he will die, when he must, without sighing and without pretense. Nature does not require more of us, in that moment, so abhorred by all. To live free, to set the heart as little as possible upon human things, is the surest means of learning to die.

Emile is destitute of the social virtues. He acts without respect to others; and it is right in his eyes that others should have no regard to him. He makes no demands upon others, he thinks himself under no obligation to any one. Standing alone in society, he counts only upon himself, and is capable of more than others at his age. He has no errors or vices, except such as are unavoidable. His body is healthy, his members are disciplined, his understanding correct and without prejudices, his heart free and without passions. Self-esteem, first and most natural of all the passions, has scarcely awakened in him. Without destroying the peace of any one, he has lived as peacefully, happily, and freely as nature will permit. Do you find that the child, thus educated to his fifteenth year, has wasted his earliest years?

Rousseau asks this question as if he were sure of his answer. What I have already said of Emile at twelve is still truer of him at fifteen. We freeze at the character of the cold boy, who has by the skill of his tutor been brought to such an independence that he asks neither about God or man, feels no need of love, has no feeling for

No. 14.—[Vol. V., No. 2.]—31.

poetry. A superficial understanding of the material world, and the bodily activity of a savage, are the highest of his attainments. A real ethical idea is out of the question, where love, the heart of all the virtues, is wanting. Only the earthly being is considered; death brings this pedagogical masterpiece to an end; and Emile endures this with the resignation of a wild beast.

FOURTH BOOK. EMILE FROM HIS FIFTEENTH YEAR TO HIS MARRIAGE.

44. *Puberty. Selfishness. Self-esteem. Innocence.*

The age of puberty now comes, and with it spring up passions whose source is selfishness. This impels every one to care for his own profit. What is useful to us we seek for that reason; what desires to serve us, we love; what hurts us we flee from; and what seeks to harm us, we hate. A child is benevolent at first, because all who are around him wait on him. But, as the circle of his acquaintance enlarges, the feeling of his relations to others grows up, he compares himself with them, and his selfishness changes into self-esteem, which lifts him above others, and requires them to hold him higher than themselves. Heat and anger spring from self-esteem. It is true that children, since they can never live alone, can live together only with difficulty. From selfishness, changed into self-esteem, comes, in simple souls, vanity, and in great ones, pride; which spring in the hearts of children only by our fault, and in our pupils even against our will.

The age of puberty is unnaturally hastened; it should be delayed as long as possible. In regard to the relations of the sexes, lies should not be told to children, but care should be taken not to awaken their curiosity upon such subjects; silence should be observed in regard to them; but what can not be hidden from them should be told them.

A child who is not born with a bad nature, and who has kept his innocence to his twentieth year, is at this age the most magnanimous, best, most loving and lovable of men. If you have never heard of this, I can easily believe it; your philosophers, bred up in the deepest depravity of the schools, could not know it.

Emile is now coming into the years when increasing freedom develops his sinful tendencies more freely; and the fig leaves of Rousseau's sophistry are less and less able to cover them. Still he adheres to his principle, that every thing wicked comes, not from the heart, but into the head from others.

45. *Happiness. Love. Sympathy. Gratitude.*

There now follow directions for ethical education; for example, the pupil is to be taught not to take apparent happiness for real and desirable happiness, and not phrases of hypocritical pretenses of love and sympathy, but to exercise real sympathy. Ingratitude is not natural to men, but is caused by such benefactors as seek their own advantage.

46. *Knowledge of Men.*

As self-esteem grows in Emile, he compares himself with his equals and endeavors to hold the highest place among them. Now is the time to instruct him in the social relations, and in the natural and civic inequality of men. He should know men in and under the masks of society, should mourn over them, but not learn to aid them. Emile knows that men are by nature good, but understands that they have become bad and depraved by means of society; in their prejudices he sees the source of all their vices; and feels himself impelled to value each single one of them, but to despise them collectively.

47. *The Study of History.*

It is now time to introduce Emile to history. Unfortunately, historical writers relate only bad things, and the good remain unknown; they misrepresent facts, do not follow the connection of cause and effect, and give their own judgments instead of leaving this to the reader. Away with the modern historians! Their works have no character; and they look upon all the men of the present day as exactly alike. Especially useless are the systematic historians; who will not see things as they are, but only as they fit into their system. Others exhibit men only as they appear in the state; and not at all as they appear at home. Of all the ancient historians, Plutarch is far the best for youth, in particular because he does not despise relating the apparently trifling traits of eminent men.

48. *Emile upon the Theatre of the World. Presumption.*

Emile now for the first time appears upon the theatre of the world; or rather he stands behind the scenes, sees the players dress and undress themselves; and by what coarse means the spectators are deceived. It will elevate him to see how the human race makes sport of itself. Educated in entire freedom, he will sorrow over the misery of kings, those slaves of all those who obey them; false wise men, in the chains of their vain honors; rich fools, the martyrs to their own luxury. He will be in danger of thinking himself wise, and all others fools; and only mortifying experience can protect him from such vanity.

Pedagogy disappears more and more. The natural man, Emile, turns into the revolutionary misanthrope; he is Rousseau himself, under the name of Emile.

49. *Emile a Natural Man.*

I shall be thought a visionary, and Emile a phantasy, because he is so different from ordinary youths. It is overlooked that he is a natural man, but that other youths are brought up according to the notions of men.

Others, at Emile's age, are already philosophers and theologians; while he does not know yet what philosophy is, and even has not yet heard God spoken of.

I am no visionary; my pedagogy is based upon experience; since without regard to rank, nation, &c., I have found what is proper to all men, and have educated Emile according to that; not as a savage for the woods, but as a man who will have to maintain himself independent in the whirlpool of society.

50. *Religious Instruction.*

We are brought up in close connection with the natural world; and for the abstract, the purely intellectual, we have scarcely any comprehension. God withdraws our senses from themselves; the word mind has a meaning only for the philosophers. Monotheism has come, by a process of generalization, from material polytheism.

In his fifteenth year, Emile does not yet know that he has a soul; and perhaps he will find it out too early in his eighteenth.

After this follows an argument against catechetical instruction. The faith of children and of many grown persons is a matter of geography; it depends merely upon whether they were born in Rome or in Mecca. Does salvation depend upon that?

A child, it is said, must be brought up in the religion of his father; and he must be taught that this alone is true; and that others are absurd. But if the power of this instruction extends only so far as the country in which it is given, and depends only upon authority, for which Emile has been taught to have no regard, what then? In what religion shall we educate him? To this there is only the simple answer, in none; we will only put him in a condition to choose for himself, that to which the best use of his own reason may bring him.

In this connection, we will introduce an extract from one of the numerous episodes with which the book abounds, that of the *Profession of Faith of a Savoyard Curate*, in which a comparison is made between Christ and Socrates:—

I confess to you that the majesty of the whole Scriptures puts me in astonishment. The sanctity of Gospel speaks to my heart. By its side, how little do the books of the philosophers appear, with all their magnificence! And is it possible that a book at once so lofty and simple can be the work of man? Is it possible that he, whose history is contained in it, was only a man? Are his words those of an enthusiast, or of the ambitious founder of a sect? What mildness, what purity in his morals! What elevation in his maxims! What profound wisdom in his language! What presence of mind, acuteness, and pertinence in his answers! What command of his passions! Where shall we find a man, a wise man even, who has known how to act, to suffer, and to die, without weakness or ostentation? When Plato paints his ideal of an upright man, who is covered with all the shame of guilt, and who deserves praise for every virtue, he draws Jesus Christ, line for line; the similarity is so striking that all the fathers of the church have observed it. What prejudice, what blindness is it to compare the son of Sophronisus with the son of Mary! How wide a difference is there between them! Socrates, dying without pain, without disgrace, bore his part, without difficulty, to his death; and if this easy death had not given honor to his life, we might doubt whether, with all his intellect, he was any thing more than a sophist. It is said that he founded morals. Others had practiced morals, and his teachings were based upon their examples. Aristides was just before Socrates defined justice; Leonidas died for his country, before Socrates defined patriotism to be a duty. Before he defined virtue, Greece had had a multitude of virtuous men. But where had Jesus found, among his own people, that lofty and pure morality which he alone practiced and taught? From the bosom of the most raging fanaticism was this highest of all wisdom developed; and the simplicity of the most heroic virtue reflected honor upon the most despised of all nations. The death of Socrates, who died peacefully philosophizing among his friends, is the easiest which could be desired; but that of Christ, in tortures, reviled, despised, accursed by a whole people, is the most terrible and fearful. Socrates, as he took the cup of poison, blessed the weeping man who handed it to him; Jesus, amidst the most horrible tortures, prayed for his enraged and hostile executioners. If the life and death of Socrates were those of a wise man, the life and death of Christ were those of a God. Shall we say that the history of evangelists is an arbitrary invention? No, it is not so; the actions of Socrates, of which no one doubts, are less authentic than those of Christ.

If this extract were to be taken, apart from its connection, it could only be believed that one who loved and revered Christ from his heart, could have written it. But before and after this passage stands the most wanton mockery of Christianity,—the very passages which subjected him and his book to the condemnation of the Parliament of Paris, which, on the 9th of June, 1762, sentenced the book to be torn to pieces and burned, the author to be imprisoned, and his property to be confiscated. The same fate awaited it in Geneva.

In his fifth book, he describes Sophie, as the model of a maiden. The tutor contrives the marriage of Emile and Sophie. When Emile becomes a father, he dismisses the tutor with the words, "God forbid that I should permit you to educate my son after you have educated his father; that a duty so holy and sweet should be performed by any other than myself."

Locke says, in his pedagogical work, "When my pupil is at an age to marry, it is time to leave him to himself." "As for me," says Rousseau, "I should beware how I imitated Locke in this." So Emile is unnaturally betutored until he becomes a father. The marriage thus planned and brought about by the tutor has a miserable end. Sophie is untrue to Emile, who gives himself up to despair, and at last falls into slavery in Algiers.*

According to Locke's recommendation I break off here, and the more willingly as the digressions become more and more numerous in the fourth book even, and the pedagogical design is more and more lost sight of.†

The sketch which I have given of Emile will be made clearer by regarding it as a book at once instructive and corrupting. Surrounded by civilization, overwhelmed with corruption, the misanthrope fell upon many instructive notions, by merely reversing what was generally received. But hate will not bring truth into existence, even from the basis of the deepest degradation of a people. It is only love which can do this; it is love alone which can cure it. Rousseau is corrupting, because he mingles truth and falsehood, good and evil, in the most cunning manner; so that good and bad are to be distinguished only by an exceedingly watchful and critical reader. I close with repeating my wish, that the preceding sketch, and the subjoined remarks, may assist the reader in such a critical separation.

ROUSSEAU AND PESTALOZZI.

A comparison between the two men repeatedly suggests itself. How noble, pure, and true is Pestalozzi's letter‡ to Anna Schultheiss, and how completely is it the opposite of Rousseau's understanding with Therèse Levasseur!

In 1819, I published a dialogue entitled "*The Progressives*," (*Die Neuerer*.) This also ended with a comparison of the French Swiss and the German Swiss.

One of the speakers in this says: "Do not take me for so bigoted an admirer and repeater of Rousseau, as to have hoped for every thing good from him. Nothing is further from the truth. I can not, however, but wonder at him, when I compare him with his French and European cotemporaries, to observè how in him the force of nature, which had been choked by an elaborately unnatural system, burst forth, and awakened the degraded conscience of the day. In

* In a fragment entitled "*Emile et Sophie on les solitaires*," this is related by Rousseau, who intends thus to show how a man educated upon his principles will remain unconquered in the most miserable condition.

† There are, however, some valuable remarks in this book; as upon the chastity of the Bible language, and unchastity of French; upon the extravagant life of power, vanity, &c.

‡ Life of Pestalozzi. Am. Jour. of Ed. Vol. III., p. 407.

him, that age confessed itself; as a worn out and repentant harlot washes off her paint, lays aside her false hair, and shudderingly looks upon her naked hideousness in the glass. In full consciousness of his errors and sins, he stands burdened with the curse of the age, and powerless to renew his life in freshness and holiness."

From the blinding fiery column of the French volcano, which served the German mariners as a beacon, but devastated its own country, we gladly turn to the mild star which rose over Germany, of Pestalozzi. Despairing misanthropy inspired Rousseau, and, in truth, such an age, and in such circumstances, he was little blamable for it. His leading idea was, that if he rejected every thing received by his age, and adopted its opposite, he would reach the truth. And so evil were the times, that, by following this malevolent impulse, he produced many excellent ideas.

Pestalozzi, however, was inspired by love of humanity, and by a desire to benefit the poor; not by a war with the rich, but by educating them. And, although he unostentatiously turned away from the overrefinement of his age, and, in evangelical imitation of Christ, went to the neglected poor, yet God blessed the purity of his aspirations, and granted him more than he asked; the joyful expectation of a great future, and to plant, by his writings and his wisdom, the seeds of never-ending development.

XI. JOHANN BERNHARD BASEDOW AND THE PHILANTHROPINUM.

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

THE Philanthropinum, founded at Dessau, in 1784, by Basedow, in which the views of Rousseau were strictly followed, and where those views were by every means sought to be introduced into actual life, gained a great reputation in Germany and Switzerland.*

JOHANN BERNHARD BASEDOW was born in Hamburg, in 1723; and was the son of a watchmaker. His mother was melancholy even to hypochondria. His father kept him so strictly that he ran away and became a servant with a country physician, in Holstein. After a year he returned, upon the urgent entreaty of his father, and went to school at the Johanneum, where he made himself notorious for useless tricks. In 1741, he went to the gynosium, where, among others, the well-known Reimarus (the author of the "*Wolfenbuttle Fragments*,") was his teacher. While there he composed many poems; e. g., one of one hundred stanzas upon history. He earned money by occasional poems and teaching, and spent it in debauchery. His studies were without rule or perseverance. In 1744, at the age of twenty-one years, he went to the university of Leipzig, with the intention of studying theology. There he studied, as he tells us, almost altogether in his own room, but attended the lectures of Crusius. The Wolfian philosophy brought him "into a state half way between Christianity and naturalism;" and he acquired, as he says, "ignorant opinions about philosophy." In 1746, he went to Hamburg as a theological candidate. In 1749, at the age of twenty-six, he took employment as private tutor with a Herr von Quaaen, in Holstein. For his pupil, seven years old, he worked out a new method of teaching language, by which he himself learned to speak and write Latin.† He learned French from the governess of the family, whom he married. In 1753 he became professor of ethics and belles lettres at the Knights Academy, at Sorøe. A treatise published by him,

* See Schwarz's "*Theory of Education*," 1, p. 460; and "*Quarterly Report on Basedow's Elementary Book*, 1771," p. 4 to 31; where Basedow gives a biographical account of himself. Also, "*Contributions to the history of the life of Johannes Bernhard Basedow*; Magdeburg, 1791."

† He gave an account of this method in a Latin dissertation, entitled, "*De inusitata et optima honestioris juventutis erudiendæ methodo*," Kiel, 1752.

"*On practical philosophy for all ranks*," brought upon him, by its heterodoxy, the ill will of the patron of the academy, Count Daneskiöld;† and for this reason he removed, in 1761, to Altona, as professor in the gymnasium. Here he published two other heterodox books; "*Philalethie*," and "*Methodical instruction, both in natural and in biblical religion*." Several theologians, and among them Senior Götze, of Hamburg, wrote against these works; the Hamburg magistrates issued a warning against them; and those of Lubeck prohibited them under a penalty of 50 thalers. Basedow and his family were not allowed the communion in Altona and the neighborhood.

From 1763 to 1768, he wrote a multitude of theological controversial works. In the latter year he published the "*Representation to the benevolent and the rich, upon schools, studies, and their influence upon the public well-being*," with a plan of an elementary book of human knowledge. At the same time he wrote to the emperor, kings, universities, freemasons' lodges, learned men, &c., to interest them in the elementary work which he proposed to publish; the most of whom answered him favorably.*

The Danish minister, Bernstorff, in order to give him time for his pedagogical labors, relieved him from the duties of his place, securing him a salary of eight hundred thalers.

His first work for schools, which was destined to become prominent, was, as Basedow himself says, his "*Book of methods for fathers and mothers of families and nations*." This book was intended for adults; and the "*Elementary Book with plates*," published at the same time, for children.

The object of the "*Elementary Book*" is, with the help of the cuts, as Basedow remarks, 1. Elementary instruction in the knowledge of words and things; 2. An incomparable method, founded upon experience, of teaching children to read without weariness or loss of time; 3. Natural knowledge; 4. Knowledge of morals, the mind and reasoning; 5. A method, thorough and impressive upon the heart, of instructing in natural religion, and for a description of beliefs so impartial, that it shall not at all appear of what belief is the writer himself; 6. A knowledge of social duties, of commerce, &c. It will be seen that this is an encyclopedia of every thing worth knowing by

* In 1771, before the first edition was completed, Basedow had already received 7000 *reichsthaler* of contributions.—("Quarterly Account," p. 20.) King Christian VII, of Denmark, gave 900 thalers, the Empress Catharine 1000, grand-duke Paul 500, the hereditary prince of Brunswick 200, "the wealthy class in Basle" 150, the royal government of Osnabruch 50, prince Czartoryski 50, Nicolans von der Flite, Abbot of Mary-Einsiedel, 42, &c. I cite these instances from Basedow's list of the contributors to the "*Elementary Book*," to show how the most different persons, in the most distant countries, took great interest in the undertaking, and conceived great hopes from it.

children, as comprehensive as was the "*Orbis Pictus*" of Comenius; the work, with its characteristic plates, may be called the *Orbis Pictus* of the eighteenth century. It appeared in 1774, in four volumes, and with one hundred plates, mostly engraved by Chodowiecki. It was translated into Latin by Mangelsdorf, under the supervision of the well-known counselor, Klotz, into French by Huber, and afterward into Russian. A little before, in 1774, had appeared Basedow's "*Agathokrator*," upon the education of future rulers. "In this," he says, "I have described the education of a truly well-trained prince; the necessary preparations for it; and its operation after he has become king. I hope that this will be one of the most useful of all my writings, and a great blessing to posterity." An age has passed since the appearance of the book, and where are the traces of its influences? how many even know that such a book existed?*

Basedow's repeated appeals for activity in the cause of education produced effects other than the spread of his writings. An excellent young prince, Leopold Friedrich Franz, Prince of Anhalt-Dessau, became interested in Basedow, by means of Behrisch, (known for his life of Göthe,) who was tutor to the hereditary Prince of Dessau. The prince, from the purest benevolence, and from the wish to further a holy enterprise, resolved, in 1771, to invite Basedow to Dessau, with a salary of eleven hundred thalers; and in 1774,† to give to the Philanthropinum, buildings, a garden, and twelve thousand thalers.

In the last year, 1774, but before the erection of the Philanthropinum, occurred Basedow's acquaintance with Göthe, whom he visited in Frankfort. Here Basedow, on his birth-day, (11th Sept.,) took a firm resolution to establish an educational institution, and to name it PHILANTHROPINUM.

From Frankfort he traveled, with Lavater and Göthe, to Ems and the Rhine. Göthe, in his life, has described Basedow in the most masterly manner, in part in the strongest contrast to Lavater.

Basedow arrived, came in contact with me, and laid hold of me on the other side. No stronger contrast could be imagined than that between Lavater and Basedow. Their very looks indicated their opposition to each other. While Lavater's features were open to the observer, Basedow's were contracted closely together, and, as it were, drawn inward. Lavater's eyes were clear and calm, and under very broad lids; Basedow's were deep in his head, small, black, keen, and looked out from under coarse eyebrows; while Lavater's temples were hung with the softest brown hair. Basedow's heavy, rough voice, his quick and sharp expressions, his somewhat sneering laugh, his sudden changes of the conversation, and his other peculiarities, were the opposite of the qualities and the conduct by which Lavater had become pleasing to us. Basedow was much sought after in Frankfort, and

* Prince Albert, of Dessau, sent Basedow, in return for a copy of the "*Agathokrator*," 100 thalers; and Joseph II a medal with his portrait.

† December 27th, 1774, the day of the birth of the hereditary prince of Dessau, then five years old, was considered as the birth-day of the Philanthropinum. See Wölke, description of the plates to the "*Elementary Book*," p. 8; and "*The Philanthropinum*," part first, p. 101.

his great intellectual gifts were admired; but he was not a man either to stimulate others or to guide them. The only work for him was to improve the field which he had marked out for himself; so that future generations should find their labors in it more easy and natural; and toward this purpose he hastened with even too much zeal. I could not interest myself in his plans, nor even make his views clear to myself. That he should require all instruction to be given in a living and natural way pleased me, of course; that the ancient tongues should be practiced now seemed to me desirable; and I willingly recognize whatever in his plans tended to a promotion of activity and of a newer view of the world; but I apprehended that the illustrations in his "*Elementary Book*" would confuse still more than objects themselves; because, in the natural world, only things possible exist together, and therefore they have, notwithstanding all their multitude and apparent confusion, always something regular in all their parts. But this "*Elementary Book*" utterly disarranged them, because it placed together, for the sake of a relation of ideas, things which never go together in the real world; so that it was destitute of that natural method which must be recognized in the corresponding work of Amos Comenius. Much stranger yet and harder to understand than Basedow's theories, were his manners. His purpose in his present journey was to interest the public in his philanthropic undertaking, by his personal influence; and thus to secure for himself access, not only to their good will, but to their purses. He had the power of speaking in a lofty and convincing way of his plans; and all men readily assented to whatever he argued. But he wounded, in the most incomprehensible manner, the feelings of the men from whom he was asking a contribution, and offended them with no reason, by not being silent upon his opinions and vagaries in regard to religious subjects. In this respect, also, Basedow was the precise opposite of Lavater. While the latter held the whole Bible, letter for letter, and with its whole contents, as true and applicable even to the present day, the former felt a most restless itching for remodeling every thing, and changing not only religious beliefs, but even the outer forms of church observances, according to his own whims. He would dispute in the most merciless and extraordinary manner against all views not founded immediately upon the Bible, but upon the interpretation of it; against those expressions, philosophical techniques, and material similitudes, with which the fathers of the church, and councils, have sought either to explain the inexpressible, or to convince heretics. He declared himself before every body, in the harshest and most indefensible manner, the bitterest enemy of the doctrine of the Trinity; and could not be satisfied with arguing against this universally received mystery. I myself suffered much in private conversation from this subject; and had forever to let myself be plagued with Hypostasis, and Ousia, and Prosopon. In opposition to these attacks, I betook myself to the weapons of paradox, surpassed his own opinions, and ventured to combat his daring notions with others still more daring. This gave my mind a new direction; and, as Basedow was much better read than I, and readier at the tricks of disputation than a natural philosopher like myself could be, I was obliged to exert myself more and more, as the points discussed between us became more important. So excellent an opportunity, if not to instruct myself, at least to exercise myself, I could not quickly resign; I prevailed upon my father and friends to give up the most important business, and I left Frankfort again, with Basedow. What a difference was there between his influence and presence, and that of Lavater! Pure himself, the latter sought to surround himself with purity. By his side one became maidenly, for fear of annoying him with any thing unpleasant. Basedow, on the other hand, far too much absorbed in himself, could not attend to any thing external. One of his habits, that of smoking coarse, bad tobacco, was exceedingly disagreeable, and was much the more so because, whenever he had smoked out one pipe, he at once struck fire again with some dirtily prepared German tinder, which caught quickly, but smelled hatefully, and with his very first whiff defiled the atmosphere intolerably. I named this preparation the "*Basedow Stink-tinder*," and proposed to introduce it under this name into natural history; at which he made much sport, and explained to me circumstantially, and even to nausea, the abominable stuff, and with great delight applied himself to my aversion. For it was one of the strongest peculiarities of this gifted man, that he loved too much to tease, and maliciously to vex, the most unprejudiced people. He could not bear to see any one at rest; he would attack him with grinning and jeers, with his hoarse voice,

put them into a dilemma with some unexpected question, and laugh bitterly if he accomplished his purpose; but he would be well pleased if any one answered him promptly. I always spent part of the night with Basedow. He never laid down on the bed, but dictated incessantly. Sometimes he threw himself down on a couch and slept, while his secretary, pen in hand, sat quietly, all ready to write, when his half-awake master should again give free course to his thoughts. And all this was done in a room closely shut, and full of the smoke of tobacco and tinder. Whenever I left off dancing I ran straight to Basedow, who was always ready to talk or discuss upon his problem; and when, after a little while, I went out to dance again, he took up the thread of his treatise, even before I had shut the door, dictating as quietly as if nothing had happened. Basedow was pursuing an object of primary importance, the better education of youth; and for this purpose he was seeking large contributions from the noble and the rich. But scarcely had he, by his reasoning or the force of his powerful eloquence, brought them, if not to the point where he wished, at least into the state of mind favorable to himself, when his vile anti-trinitarian notions would catch hold of him, and, without the least regard for the place where he might be, he would break out into the strangest speeches, exceeding religious in their intention, but, according to the beliefs of society, exceedingly abominable. We tried to find means of preventing the mischief—Lavater by mild earnestness, I by evasive sport, the ladies by diverting walks; but the trouble could not be removed. Christian conversation, such as was expected from Lavater, pedagogical, such as was looked for from Basedow, sentimental, such as I should have been ready for, all were alike broken up or changed.*

Basedow had at first, at Dessau, only three assistants, Wölke, Simon, and Schweighäuser. The first of these was the most efficient in the work of teaching.† He was born in 1742, at Jever, and died at a great age, known especially for his remarkable labors for German orthography. He first began to study in his twentieth year, but had before learned, without a teacher, drawing and etching. In five half-years he finished the necessary studies in Latin, Greek, and French, entered the University of Göttingen in 1763, (where he studied chiefly mathematics, natural sciences, and French,) and in 1766 went to Leipzig, where he taught Latin and mathematics. Through Büsch he came to Basedow, at Altona, in 1770, to assist him in working upon his "*Elementary Book*."

Here Wölke made his first experiment of a new method of instruction, upon Basedow's daughter, Emilie, who seems to have been named after Rousseau's "*Emile*." This experiment stands in such close connection with the Philanthropinum, and is so characteristic, that I shall give Wölke's own account of it. He says:—

When I came to Herr Professor Basedow, at Altona, at new year's of 1770, to take part in the labor upon his "*Elementary Book*," in the departments of natural history and mathematics, his little daughter, Emilie, was three-quarters of a year old. My inclination to be employing myself about children led me to help her mother, who was instructing her carefully, about an hour a day, in little exercises, which, if made as complete as possible, are much more important than would be supposed. I taught her, for example, after a certain order and selection, about things of all kinds and their qualities, by showing them to her, and by clear and accurate descriptions of them; how to stand up, how to fall down judiciously,

* Göthe's Works; 22, 273—3, 279, 80, 91. Edition of 1840.

† See Wölke's autobiography, in Basedow's work, "*The Philanthropinum, established in Dessau, 1774*."

how to save a fall by catching hold of something and by other means. Both in sport and in earnest, we were very careful to avoid that confusion of ideas which is usual in such teaching. For example, she saw in a looking-glass not herself, but her image; in pictures, not men, trees, beasts, but only their representations; she was not permitted to call the cooked meat and bones of a hen, a hen, nor a doll a baby, a penny a ducat, &c. By such care, which I earnestly recommend to all in charge of children, and such a method as is now taught in the "*Elementary Book*," Emilie had in her third half-year learned to form opinions with a correctness which was the admiration of all who saw her. When she was a year and a half old, she could not only speak much more clearly and correctly than is usual at her age, but, by means of our peculiar method of teaching spelling before the knowledge of the letters, to understand sentences if we only said over the letters of them to her. If, for example, any one said to her the letters *y o u s h a l l h a v e a c a k e*, she would say "you shall have a cake." The success of this practice, the facility of which had been foreseen by Herr Professor Basedow, pleased him exceedingly, when Emilie, without further trouble or the wearisome spelling in a book, learned to read in a month, to her own pleasure and to mine. This was at the end of her third year. Three months after this, Herr Professor Basedow left home for ten weeks. To give him a pleasure at his return—for he had but little during his labors upon the "*Elementary Book*"—I exercised Emilie in that time in French, of which she had not before heard a word. In a month and a half, she could speak of her wants and of things about her, in French, so well that the mixing of German words in the instruction was no longer necessary. Since the Feast of St. John of the present year, I have done something similar in Latin, with a boy of five years old; of which I shall speak further. Emilie learned French as quickly as she did German. In this language I used a book called "*Joujou de nouvelle façon*;" for the elementary "*Manuel d'éducation*" was not yet published. About a month and a half after the beginning of this learning to read, Emilie was with us for a few days with his very worthy grace, the Herr Canon von Rochow, where she excited the wonder of various gentlemen, masters, and officers from Brandenburg and Potsdam, by her facility in reading German and French. At this time she read, in writing and printing, German and Latin; knew a large number of natural objects and tools, with their origin and use; distinguished, with reference to the particular case, mathematical lines, surfaces, and bodies; counted forward or added to 100; backward or subtracted, by ones and by twos, from 20 or 21 to 0 or 1; practiced drawing or writing by copying the copies in pencil which were set before her; sometimes dictated a letter to her father, &c. With all this knowledge, which Emilie acquired in play—that is without exertion or harmful sitting still—we avoided the fault, so common in such circumstances, of making her what is called a learned lady, who is lifted by her knowledge above her sex, and neglects her feminine employments. She was, on the contrary, in every way imbued with a love for feminine labors, and instructed in them. She was often, and with much pleasure, employed in preparing food in the kitchen, setting the table for the children, putting the table-furniture, &c., which they left in disorder, in its proper place, and had made a good beginning in learning to sew and to knit. I have taken every opportunity of drawing Emilie's attention to the goodness and wisdom of God, in her studies of nature. She often rejoices in God, as in a wise, powerful, and good father of herself and of all men. She takes pleasure in the lightning and thunder, recognizing them and the rain which follows them as indispensably divine benefits, by means of which vegetation, for the nourishment of men and beasts, is supported, and the beautiful flowers are made to grow. She rejoices in the convenience and human form of her body, in the reasoning faculties of her soul; in rain, wind, snow, and darkness, even when she suffers inconvenience from them, and at times when others complain of them. The sight of caterpillars, spiders, mice, snakes, and lizards, is neither disgusting nor frightful to her. She has never had any trouble about witches, ghosts, or the devil, since they have never been named to her as things which do any injury to man. The silly representations of the devil are only ridiculous to her; not frightful. Of the Christian religion she knows many portions, but only such as will be useful at her age; preparatives to virtue, to trust in God, and to peace. Although she speaks and judges upon many subjects, yet she has never made any misuse of what has been told her of the origin of the human race. Up to Michaelmas 1773, when she

was four and one-half years old, she heard not a word of Latin. Her father having at that time to go to Berlin on business connected with the "*Elementary Book*," I was desirous of preparing for him at his return such a pleasure in his daughter's knowledge of Latin as I had the year before in that of French. I had, however, so many employments, that I could talk with Emilie only two hours a day. My instruction was still more interrupted by my absence at Berlin during November. Yet, Emilie now speaks Latin with a facility and correctness which is admired by many. For the sake of any who may doubt the truth of this account, and who may be willing to believe it, if they or any one whom they can trust will visit us, to hear for themselves, I will have an examination, (which otherwise I am very willing to avoid,) in which they may hear that Emilie (who has never learned one word by rote, after the school fashion,) knows at least fifty words of any two leaves taken at random from Cellarius' Dictionary, (because most people take the number of words known for a measure;) and that from the same book, of one hundred and twenty leaves, she knows at least three thousand words, and that, not after the fashion of a school-boy, but like the words of her own mother-tongue. And of these fifty words, I can vary each, by declensions and conjugation, so that no less than five hundred different questions can be made from them, which Emilie shall answer. Thus no one can doubt that, with all these words from Cellarius' dictionary, (besides which she knows many others,) more than thirty thousand questions can be asked, all differing from each other, which she can understand, and can either translate correctly into German, or answer them in Latin, whichever is preferred.*

Basedow himself published an account of his daughter,† from which it appears clearly how far his instruction followed Rousseau's plans. He says that, when she was scarcely three and one-half years old, she began to observe "errors in correct reading, both in French and German." And in anticipation he says that, "before the end of her ninth year, she will fluently read in German out of Latin writers." If the question is asked, what is the purpose of all this? Basedow answers, "I intend Emilie, God permitting, for the teacher of other girls."

This remarkable child was repeatedly cited by her father and by Wölke, both in writing and speaking, as a standard by which it might be judged what was to be expected from the Philanthropinum. These expectations were especially excited by the periodical which Basedow published, under the title "*Philanthropic Archives*;" addressed by the fraternity of friends of youth to the guardians of humanity, and to fathers and mothers, who may send children to the Dessau Philanthropinum. Dessau, 1776." The preface, Feb. 1st, 1776, is addressed "To guardians, intercessors, benefactors of humanity, intelligent cosmopolites."

This singular address is surpassed in the second part of the "*Archives*," which is dedicated, in the name of the Philanthropinum, to four kings. First, to Joseph the Second, the "Father of Germany." "I honor you," it says, "as the most eminent of all the inhabitants of the world, and as one of the best; as my own indirect supreme lord and protector; as the foundation of my hopes for better times in

* *Ib.*, p. 44-52. † Quarterly Account, sixth part, 1773.

Germany," &c. In the dedication to the king of Denmark, Basedow calls himself a Cimbrian; and, to the Empress Catharine, he promises to establish a Catharineum, for women from all the world. (*Weltbürgerinnen*.)

The Philanthropinum had been in existence seventeen months, when the first part of the "*Archives*" appeared. Basedow gave an invitation to the great examination, on the 13th, 14th, and 15th of May, 1776.

"Send children," he says, "to a happy, youthful life of studies certainly successful. This affair is not Catholic, Lutheran, or Reformed, but Christian. We are the philanthropists; cosmopolitans. The freedom of Switzerland, here, is not placed below the sovereignty of Russia or Denmark, in our teaching or our opinions." He adds repeated appeals for contributions.*

Further† he says, "The aim of education must be, to train a European,‡ whose life shall be as harmless, as useful, and as peaceful, as it can be made by education. Care must also be taken, 1. That he may endure little trouble, grief, or sickness; and, 2. That he may learn to take real pleasure in what is good."

"The wisdom of all wisdoms is virtue and peace. Few exercises in virtue, as it should be taught, in our education, are found. Here, ye wise men, ye philanthropic writers, a plan for an orderly arrangement of exercises in virtue, for parents and schools, is one of the most important works for the good of all humanity. Were we rich, we would offer ten thousand thalers for the best book of this kind which should appear within two years."§ "For the paternal religion of each pupil," Basedow remarks, "the ministry of this place will care. Natural religion, however, and ethics, are the chief part of philosophy, of which we have charge. In the Philanthropinum the first beginning of instruction is, to have faith in God as the creator, upholder, and Lord of the world. As we have a universal, Christian, Philanthropinist liturgy, approved by persons of reputation in all the churches, we promise to give a general Christian instruction, which, by means of its omission of all points of distinction, shall offend neither Catholics, Protestants, nor Greeks; but which shall necessarily please all Christians, even if they are as different as Zinzendorf and Foster."||

In this universal, private instruction in religion, he says further,¶ "Neither word nor deed will be introduced, which will not be approved

* Boarders paid two hundred and fifty thalers. "*Archives*," p. 38. † *Archives*, p. 16.

‡ By a European, "we understand a man of a civilized nation, who has such manners and dispositions as are almost universal in Europe."

§ *Ib.*, p. 20, 21. ¶ *Ib.*, p. 39. ¶ *Ib.*, p. 63.

of by every one who fears God, by the Christian, Jew, Mohammedan, or Deist. And just as satisfactory shall we be to the friends of all systems of Christianity, from Zinzendorf to Foster." Afterward, clergymen of the different professions may "instruct, drill, and convince the children in their paternal religions." *

All the Philanthropist manuals are to be free from "theologizing distinctions in favor of Christianity as opposed to the Jews, Mohammedans, Deists, or the so-called Dissidents, who are in some places called heretics."

"In the temple of the Universal Father, the Dissident brethren appear like brethren with the rest. And until that time let us come like brethren, one (as long as the difference shall last,) to the holy mass; another to pray with his fellows, after one form; and a third to pray with his fellows, after another." *

So much may suffice to describe Basedow's religious tendency; his proceeding from the broadest deism is the most general idea, (leaving out the poor heathen, after Rousseau's example,) to the narrow idea of Christianity, the still narrower ideas—illiberal ones as Basedow thinks them—of the Christian professions, he leaves to be taught to the children by the clergy. The positive ideas which he lays down I shall consider hereafter.

From what Basedow says in his invitation of the moral and religious tendency of the Philanthropinum, I proceed to what he promises, and claims to have accomplished, in intellectual education, in Latin, German, French, knowledge of nature and of art, and mathematics.

Of memorizing, he says, there will be but little with us. The students will not be forced to learn even by advice. Yet we promise, by the excellence of our method, and by means of the agreement of it with the whole of the Philanthropist education and method of living, at least twice as much progress in study

* "He who believes in one God, and in the eternal existence of virtue, will not be a heretic in the institution. Public religious exercises will be, as heretofore, merely the worshiping of God, or Christian merely in general. The former, the chief Rabbi, or the Mufti, if they understood them, could not disapprove of; and by the latter, the Catholic, the Greek, the Protestant, the Bohemian brother, and the Socinian, would be edified. Any thing more is the province of the ministry."

† The interest taken by the Jews and Freemasons in the Philanthropinum is remarkable. Thus, four Hamburg lodges sent five hundred thalers, one at Leipzig one hundred, one at Göttingen twenty-five. One Meyer translated an "*Explanation of Freemasonry*" from the English, and recommended the Philanthropinum to the support of the masons. "Basedow's Philanthropinum," he says, "that quite masonic design for making poor humanity more fit for the purpose of its being, by a reasonable instruction of youth, for spreading virtue, religion, and knowledge, and removing prejudices," &c.—("Pedagogical Conversations of Basedow," part first, p. 104.) Had Basedow, without being a freemason, made application to this "honorable fraternity of architects of the council-house of universal citizenship, pupils of Solomon and Socrates," as he calls them?—("Philanthropinum," p. 8.) From the Jews, especially from those of Berlin, he received at one time five hundred and eighteen thalers, &c. Among others, Mendelssohn interested himself for him.

as is usual in the best schools, boarding institutions, or gymnasiums. And especially we promise great development of the understanding, by the practice of a truly philosophical art of thinking.

The results which have been already shown prove that what we promise is true. In the telling, and when their means are not seen, they are incredible. Every thing is so pleasant with us, that no one wishes to be at home again. At the age of fifteen there is need of punishment but few times a year. The pupils learn without sitting too much, and more outside than in school-hours. Of our method we can say (and God knows it is with fairness and reflection,) as follows: when we have all our apparatus and arrangements all completed, a boy of twelve years old, who shall be sent to us, with his manners not too far destroyed, and of moderate capacity, if he knows only how to read and to write, will become with us, without constraint or discomfort, in four years, well fitted to study for either of the higher faculties in a university. For, whatever is valuable for all students in the philosophical faculty, he will have studied with us so thoroughly that, in order to arrive at a higher grade, he will need only himself and his books. From this measure of our institution all other things in relation to it can be judged of.

You wise cosmopolites, this is said, not by foolish project-makers, idle talkers, but by men who are worthy of friendship and of your assistance.

One language requires, with us, unless it is to be brought by grammatical exercises to the natural degree of accuracy, six months, in order to enable the students to understand whatever he hears or reads in it, as if it was his mother-tongue; and to speak and write it, little by little, after rules, by himself.

After this we require six months more of grammatical exercises, to make a Latin or a French scholar so complete, or so little lacking of it, as it is not possible for him to be from the ordinary school, without uncommon good fortune, genius, and application.

In May, 1775, he says, two boys, of thirteen and seventeen years, were sent to the Philanthropinum. "They had minds of ordinary capacity. Neither of them had the least attainments in study, or the least rudiments of Latin. They can now, (Feb. 1st, 1776, nine months afterward,) understand a Latin address on any art which may be selected, if only the technical terms be explained to them, and the unusual words made clear by Latin synonyms, or by the connection. They read a classical author understandingly, if he is easy; that is, if he is good. They can express themselves, either orally or in writing, upon any subject, so well that they would get on much better in ancient Rome than one could do in Leipzig now, who could write and speak only low Dutch."

This is roguery. Further on Basedow praises himself for having found a way of making the work of learning "three times as short and three times as easy as it usually is." All studies must be arranged in a common plan, and be placed, by means of uniformity of text-books, in such a connection that one shall always shorten and assist the other. Only the useful part of each science is to be learned.

To fill up the sketch here given from Basedow's invitation, I quote the following from a letter of his written to Campe, the same year; which, as they say, lets us into the whole programme. Latin, he says in this, must be learned by speaking; and, for this reason, Basedow requires his teachers to use every means to gain facility in speaking Latin. They must use all their leisure in reading the colloquies of Erasmus, Terence, &c.; they must try, when alone, to translate silently in their thoughts expressions which they could not manage in conversation, and "get all their religious instruction from Castalio's Bible only."

"The actual design of the institution, it would scarcely be possible

to follow out. But Latin, Latin—when we see that the end of our well-trodden and brief road leads to correctness and elegance, (not to say any thing of eminent skill,) in this language, this alone can give certain encouragement. But well for thee, thou dear young posterity! you learn Latin, Latin, without rod or care! Greek, however, we shall not teach by speaking; it is too difficult.

But ye ancient and modern languages, ye tormenting ghosts of youth, ye flatterers of unthinking people, who have memory and patience, when will it be possible to have the name of being well-educated, intelligent, and learned, without having at first let one's self be destroyed by your discipline and afterward by your flattery!

I return to Basedow's "*Invitation*." In this he very openly asks for contributions. "Dearest cosmopolitans," he says, "your wills may be most heartily good and your sentiments correct; but our enterprise can not go into operation except by means of deeds."

Let us, lastly, hear how urgently he invites.* "We promise," he says, "under the penalty of contumely, that upon the aforesaid 18th of May, (1776,) there will be in the Philanthropinum so much worth seeing, hearing, investigating, and considering, by the intelligent guardians of humanity, in regard to schools, that it will be worth their while for some of them to be sent to us, by the order of the German Diet, from Copenhagen, Saint Petersburg, and the most distant places; for it is a duty, by the arithmetic of morals, in respect to such good works as must be of great use, to proceed upon probabilities. God, thou father of posterity, secure us, we pray thee, a hearing with the wise inhabitants of the world."

The examination which was to decide upon the existence or non-existence of the Philanthropinum took place, and was, according to Basedow's expression, "attended by many skillful men, citizens of the world, most of whom had come abroad for the purpose." Among others came from Berlin, Nicolai and Teller; from Halberstadt, consistency-councilor Struensee; from Leipzig, Plattner and Zollikofer; from Magdeburg, Resewitz and Schummel; from Potsdam, Campe; from Quedlinburg, Stroth; from Hamburg, Bode, the translator of Montaigne; and from Rekalm, Rochow.

The Philanthropinum however included only thirteen pupils, besides Emilie and Friedrich Basedow. Two accounts of the examination are lying before me, one by Basedow, the other by the above named professor, Schummel; it is entitled "*Fritz's journey to Dessau*."† They agree with and complete each other. I shall, however, chiefly follow the journey, which is in a form of letters from a boy of twelve,

* *Ib.*, 58. † Basedow's account is in the 2nd part of "*Philanthropinist Archives*," No. 14,—[Vol. V., No 2.]—32.

who goes with his father to Dessau ; as it is from an impartial person.

In the third letter the boy says : " I am just come from the Philanthropinum ; I already know Herr Basedow, Wölke, Simon, Schweighäuser, and all the little Philanthropinists. I am already greatly delighted, and do not know where to begin."

Fritz goes to the Philanthropinum with his father. " There are two great houses close to each other, all painted white, and right before them the great wide square with trees, and between the houses and the trees the street goes through. One of the scholars, but one of the real scholars, only one of the lower ones, whom they call Famulants, stood at the door and asked us if we would like to speak to Herr Basedow ? We said yes ; so he let us right into the house, and we knocked, and some one said " come in ! " Herr Basedow was standing behind a desk, in his dressing-gown, and writing ; we came upon him at a somewhat inconvenient time ; but he was very friendly, and told father that he must not take it ill that he had so much work to do in the morning ; but that at evening he would call upon us at our lodging. Then we went away, and went into the Philanthropinum. Father asked for Herr Wölke. He was at table, but came immediately out. He is a large, tall man, with a worn face ; but I know very well that that comes from hard labor ; for he often works day and night. He otherwise looks so good and so friendly, that one must be good to him from the very first. He asked us if we would like to come in and see the Philanthropinists at their meals, and immediately he opened the door and showed us in. The whole table was full of great and small, and there was just one lady there ; she was Frau Wölke."

In the fourth letter he describes the Philanthropinists. " They all have the hair cut short, and none of them patronize the wigmaker. The children go without neckcloths, with their necks open, the shirt turned back over the dress."

In the fifth letter Fritz describes the little girl already mentioned ; " snow-white, with coal-black hair, and a wreath upon it. The child looked at me and said to me in Latin, *Salve* ; and threw me a kiss." This was Emilie Basedow.

He very correctly describes the prince and the princess as a most beautiful pair ; and relates that the prince had been in France and Italy, and was very much beloved.*

* The author does not, in this, flatter this excellent prince. He was a very accomplished man ; to be convinced of this, it would be enough for any one to see the gardens which he laid out at Wörlitz. The whole of his little territory, indeed, he brought almost into the condition of a garden. And what is still more, he enacted paternal care over all, even the very least of his subjects, and was heartily loved by all of them. I was born in Wörlitz ; my father served that prince for more than fifty years ; and he himself gave me the account of his

He mentions Wieland, Göthe, and Lavater as expected, but as not coming; and then describes the guests: Teller, Rochow, Zollikofer, Bode, &c. Of consistorial-councilor Struensee, of Halberstadt, a distinguished educator, he says he was not very well pleased; or, at least, he kept looking straight before him with a very serious face.

In the eighth letter, he comes to the examination:—

The children did some very droll things. First they played the commander game; all together, some eight or nine; do you see, Charley, this was the way. First, they all stood in a row, like soldiers. Herr Wölke was commander; he commanded in Latin, and they were to do every thing that he said. For example, when he said *claudite oculos*, they all shut their eyes; or, *circumspicite*, and they all looked around them; or, *imitamini sartorem*, and they all sewed like tailors; or, *imitamini autorem*, and they all drew out waxed-ends, like cobblers. Herr Wölke ordered a thousand queer things.

Now I will tell you about the other game; the hiding game. In this, a word is written behind the blackboard, where the children can not see it; the name of some part of the human body, or of a plant, or a beast, or a metal; and then they guess what it is, until one of them guesses it; and the one who guesses it has an apple or a piece of cake for a reward. One of the visitors wrote on the board, *intestina*, the intestines; and told the children that it was a part of the human body. They then began; one guessed *caput*, others *nasus* or *manus*, *pes*, *digiti*, *pectus*, *collum*, *labium*, *genu*, *aures*, *oculi*, *crines*, *dorsum*, and so on, for a long time, until at last one cried out it is the intestines! Then Herr Wölke wrote the name of a beast. I can not now remember myself what it was. They then began; if you could have seen it! *Leo*, *ursus*, *camelus*, *elephas*, for you must understand it was a four-footed animal, *eques*, *bos*, *asinus*, *vacca*, *sus*, *canis*, &c. Well, now I remember it! at last one said *mus*, a mouse; he had guessed it, and he received a piece of cake. Once the name of a city was written; and then they guessed Lisbon, Madrid, Paris, London, Stockholm, Copenhagen, until they came to Petersburg, which was the name written behind the board.

Then they played still another game. Herr Wölke ordered in Latin, and the children imitated the voices of beasts; so that we laughed until we were weak. Sometimes they roared like a lion, then crowed like a cock, mewed like a cat; made noises like a donkey, a dog, and a raven; in short, like every thing which was told them.

Herr Wölke brought in a picture, hung it up, and said, "Dear children, I bring you here a picture which you have not seen; and I tell you beforehand, it represents the most serious thing in the world; so do you be serious also." And the children were. Now I must first tell you what the picture was. First, a pregnant woman was sitting in an arm-chair, and near her stood a man who held her by the hand. Next, on the other side stood a table, and on it lay two little caps, one for a girl, and the other for a boy; and underneath stood a tub, with water and a sponge in it. Then Herr Wölke began to ask what sort of a woman this was, and why she looked so sad, and why the man held her by the hand; and the children said that it was a pregnant woman, and that the man who stood by her was her husband, who was encouraging her, because she was in great danger, and would almost die. Then Herr Wölke asked further, what was the meaning of the two little caps? Then some of the spectators began to laugh; but if you could once have seen Herr Wölke, how serious he was, and how he at once turned round to us and requested us very earnestly not to laugh, during so serious a business, or he should much rather not teach at all. Then in a twinkling all was as still as a mouse. Then he began again, and asked about the little caps. Then the children said, it was not known whether it was a boy or a girl that was coming, and therefore the parents had made both caps. But there were a great many things more that Herr Wölke said and asked about, as, for example, he said about the table and water, that when the child came into the world, it would

beneficence; which facts may serve as an excuse for these remarks, which I have written from a thankful heart and with truth.

strangle in its own blood, if its good parents did not take it, and wash it, and clean it. After this Herr Wölke began and made an address to the children, which I shall never forget in my life. I remember almost all of it, although I had to cry almost all the time. "Listen, dear children," he said; "if I were able to hate any body, although I am not, it would be that one among you who could be so godless as to be ungrateful to his parents. Think once what your mother has undergone for you! She came into danger of death, for your sake, and endured the most inexpressible pain; and your parents had cared for you even before you came into the world. How then do you think you can be thankful enough to them?"

Then Herr Wölke asked Fabreau, one of the children, where the little children came from. Then he began to smile and said, "Parents tell very different stories about it. There are judicious parents, and silly ones. The judicious ones say the mother bore the child; the silly ones, that the stork brought it!" Then he asked again, "If your mother bore you, whom have you to thank for being in the world?" "Why," he said, "I have to thank my mother." "But what if it was the stork that brought you?" "Then," he said, "I should have to thank the stork;" and he laughed heartily. I wish I had been as wise, in my sixth year, as Fabreau! How I would have answered my aunts, when they always kept telling me that silly story about the stork! But I am wiser now; let them try it again!

I could not pass over this coarse and conceited examination, especially as Basedow himself speaks of it with emphasis. He says, "We tell the children the truth about the generation of beasts and men. We do not dwell upon the act of generation, but upon the results of it; the painful pregnancy of the mother." The picture which was hung up was taken from the "*Elementary Book*," and printed on a large scale. "Some hearers," relates Basedow, "cried out, 'now it's coming!'" and others laughed, but Wölke said to them, 'we beg you not to laugh,' and this was the only part of our plan which was laughable." "O, how hard it is for good reformers," he adds, "to overcome the hindrances which are placed in their way by the good!"*

Now Fritz comes to the instruction in arithmetic.

First Herr Wölke dictated a number as long as my arm; the blackboard had scarcely been set up, before Emilie began with 149,532 quadrillions, so many trillions, so many billions, and then the millions, thousands, and hundreds, until it was all done. Then they went to adding. Herr Wölke wrote a long row of figures under each other, as many as ten, and there was none of the children who took chalk; they reckoned it all in their heads, or often counted upon their fingers, and brought every thing out right to a hair, and often corrected even Herr Wölke, when he made mistakes; but he did that only for sport. So they went on for a long time, and the spectators all had much pleasure in seeing the children so ready, and able to work out an example before one could turn his hand over.

From arithmetic Wölke proceeded to an "experiment with all sorts of little drawings."

* Philanthropinum, part 2d, pp. 26, 27. All this is very delicate, however, in comparison with an article of Wölke's in Vol. 2d of the "*Pedagogical Conversations*," entitled, "When and how shall children be taught that their father and mother are the origin of their life?" and in particular the extracts given from Basedow's "*Elementary Book*." One paragraph begins: "But no woman becomes pregnant until, &c." It appears from the article that Rousseau's "*How children are made*, &c." was the immodest theme upon which Basedow, whose character was the opposite of Lavater's delicacy, made the most vulgar and indecent variations.

Then he took chalk and asked the children what they would like to have him draw. *Leonem, Leonem*, they all cried out together. Then Herr Wölke pretended that he was going to draw a lion; but instead of that he drew a great beak. "Hu," they cried out, "*non est leo, non est leo.*" "Why not?" "*Quia habet rostrum,*" they said, "*Leones non habent rostrum.*" Then Herr Wölke drew the ears, but frightfully long. Then they cried out again that it was not right; that they are asses' ears. In short, they told Herr Wölke every thing that he was to draw, from the head to the tail; and then they had not had enough of it. They told him to draw a boy on the lion. Then Herr Wölke drew it carefully, all wrong; first an eye was wanting, then an ear, then the nose; and the children saw it in a moment, and made him put it in. And that was not enough either. The beast must have a bridle in his mouth, and the boy must hold the bridle in his hand; it was a figure to laugh yourself speckled at. When that was through, Herr Wölke asked them what he should draw next; and they all cried out, *domum, domum!* "Good," said Herr Wölke; "and now what is the first thing in a house?" *Fundamentum, Fundamentum!* Then in a twinkling he drew the foundation. Then they told him to make the first story and then the second story, and then the roof; and he did it. "What next?" *Januam, januam!* "And where must the door be?" *In medio, in medio!* "But I will not put it in the middle this time," said Herr Wölke; "it shall be here;" and so he drew it pretty near one end. "Yes," said the children, "but then there must be one at the other end too." "But why?" *Propter symmetriam.* When that was done, he proceeded to the window. Herr Wölke did it, on purpose, wrongly; but they told him how it must be; and which was too large or too small. Then came the chimneys; and Emilie drew a chimney-sweep on one of them, with a broom. Then they played another game, called the judicial game. In this they threw dice, and he who lost had to explain a picture. These pictures represented all kinds of artisans. The first I did not know; it was a turner. But I knew all the others. There was a sculptor, a painter, and a scribe. The sculptor had a chisel in his hand, and was chiseling a Minerva, and the whole room was full of statues.

In the twelfth letter Fritz relates what happened on the last day of the examination. There had been on the first day a sort of celebration, after the pattern of Basedow's universal religion; but on the last day it said, "First there was divine service, and this time according to the Christian religion." Basedow has given the exercises performed on the three days of the examination.* The first was a "universal worship of God." There was a liturgy alternating with a "choir of experienced worshippers of God," and with the congregation. The whole is a deistical, ethical, prosaic patch-work; Christ is not named in it. For example:—

Give the dark nations wholesome light;
Make every doubter see;
Belief by force continue not,
Nor forced hypocrisy.

May those with child have strength from thee,
Their children strong be made;
And may the pain of bringing forth,
With pleasure be repaid.

May youth grow up with worth and strength
Beneath thy training wise;
And give to all the wish to aid
The schools' great enterprise.

* Philanthropist Contributions, p. 1, &c.

Give wisdom to all friends of youth,
And tasks not too severe;
The seed we sow is still despised,—
The harvest is not here.

The second divine worship held at the examination is entitled: "A foundation for youth, of instruction and education, in faith in God, from the study of nature and a sense of conscience, with the help of faith and the example of adults." Nothing is said here, either, of Christianity; but the matter is a stupid, poetical kind of prose, mostly about the creation; for example: "Before the beginning of things whispered no soft brook, roared no falling cataract." And the liturgy says: "Hear, ye children, pleasant teachings, which you will certainly believe, when you understand them and consider them."

Lastly, Basedow gives the divine service held on the third day of the examination. It is entitled, "Foundation of a Christian instruction and exercises of conscience for children, with the help of their elders;" and begins with, "We all believe on Jesus Christ." The former line, "We all believe in one God," is considered as having been disposed of in the previous deistical service. The whole is orthodox, and agreeable to the apostolical confession of faith; being universally Christian, it appears calculated for Catholics, Greeks, and Protestants, for all who believe in God and in him whom he has sent; even for Jews.*

On this same third day of the examination, Basedow delivered an address, whose burden was, "Support the institute!" He says: "Fathers, fathers! Mothers, mothers! Have patience! Give a part of your superfluous manure for the garden where our happiness, (that of our children and our childrens' children,) is planted and waited for. Remember the defects of your own school lives." He asks over and over again for thirty thousand thalers, and uses all sorts of inducements to give. "Whoever gives not less than fifty thalers, but not more than five hundred, shall have his name, with a number showing how many times fifty thalers he has given, cut in capitals in the bark of a young tree, in a grove of lindens, consecrated to that purpose."

After Basedow's speech, Simon examined the children in French. He explained to them a "picture of Spring." "First," says the letter-writer, "he asked them one and another question, and then brought out a model of a plough and of a harrow, and showed them every thing belonging to the plough, and how the farmer uses it when he

*After what has been said before upon Basedow's religious views, we might wonder at this orthodoxy. But in this, as in Latin, he knew how to comply with the times. De Marées, well known for his Christian character, was then, as superintendent, at the head of the church in Dessau.

ploughs. Now it was that I saw what it was to learn words after Herr Basedow's methods. I never, in my life, knew what was a harrow in French; and now, while Herr Simon was showing the harrow, I heard it, for the first time, called *la herse*, and now I know that I can never forget it."

Afterward a historical examination, upon Alexander's expedition to India, was held by Mangelsdorf, the same who translated the "*Elementary Book*" into Latin. Basedow says that the answers were very well made; Fritz says that Mangelsdorf asked his questions of one scholar especially. This scholar was one of the four who translated a passage from Curtius, and the eighth chapter of the Gospel of John from Castellio's Bible. Basedow repeated the passage from Curtius, by periods, and each of the four "translated it correctly and with facility. And none of them had heard a word of Latin a year before, nor during that year had they ever committed one word to memory, or learned any thing from Donatus or the grammar." After another year, he promised, these scholars should be able to translate into Latin, from any German book which they could understand, orally or in writing, "with grammatical correctness, and not bad rhetoric."* "The spectators," says Fritz, "were much pleased with the Latin, all except one couple, whom I heard reasoning doubtfully to each other by themselves. They said that this was all mere childishness; that they ought to bring up Cicero, Livy, Horace, Virgil, and the like; and that then only it would be seen whether the Philanthropinists understood Latin."

In geography and natural history, no examinations were made. Two of the elder Philanthropinists demonstrated the Pythagorean theorem, and proved a trigonometrical problem.

After the examination came an exhibition of two plays, by the children; one in French and the other in German. The prince took the most friendly care of the guests who came to Dessau to the examination, both there and in Wörlitz; so that most of the strangers went away with high opinions of the examination itself, of Dessau, and especially of the beautiful prince and princess. Advantageous accounts of the result appeared, soon after, in the "*Deutsche Merkur*," and in the "*Allgemeine Deutsche Bibliothek*."†

Among those who declared themselves in favor of the Philanthro-

* *Ib.*, p. 15. The younger scholars translated from the "*Colloquies*" of Erasmus.

† In the "*Merkur*" for 1776, is the report of Canon Von Rochow. Stroth, of Quedlinburg, also wrote upon the examination; Prof. Eck, of Leipzig, chaplain Rambach, of Quedlinburg, and others, wrote letters in praise of it, which he caused to be printed ("*Philanthropinum*," part 2d, p. 107); and provost Rötger, of Magdeburg, wrote, also on the same, "*Letters of an Impartial Cosmopolitan*."

pinum was Kant. In 1777, he published, in the "*Königsberg Gazette*," the following article :—

For the Common Good.

There is no want, in the civilized countries of Europe, of educational institutions, or of teachers, ambitious to be useful in their calling; and it is equally clear, that they are all, taken together, spoilt, by the fact that every thing in them operates against nature, and thus they are of very much less benefit to man than nature has made the latter capable of; and it is clear that, inasmuch as by education we become men, from brutish creatures, we should in a short time see around us men of an entirely different character, if a method of education wisely derived from nature herself should come into universal use, instead of one slavishly imitated from the custom of a rude and ignorant antiquity. It is however in vain to expect this benefit to the human race from a gradual improvement of the schools. They must be revolutionized, if any thing good is to be derived from them; for they are bad in their fundamental organization; and even their teachers themselves must receive a new training. It is not a slow reform, but a quick revolution, which can accomplish this. To this end nothing is wanting, except one single school, organized anew from the very beginning, strictly upon the right method, conducted by intelligent men, not from pecuniary but from honorable motives, watched over during its progress to completion by the attentive eyes of men of experience in all countries, and sustained until its maturity by the united contributions of all the benevolent. Such a school would not be merely for those whom it would instruct, but—which is infinitely more important—for those to whom it would give an opportunity to train themselves, in gradually increasing numbers, for teaching upon the true system of education. It would be a seed, from the careful protection of which, in a short time, a multitude of well-trained teachers would spring up, who would supply the whole land with good scholars. Interest for the common good of all countries should first be directed to this end; to get assistance from every place to such a model school, that it may quickly attain that entire completeness, the sources of which are already within it. For to imitate its organization in other countries immediately, and to keep imperfect and hindered in its progress toward completion, what should be the first perfect example and seed-bed of good instruction, would be to sow unripe seed, in order to reap weeds. Such an educational institution is no longer a mere idea; but the actual and visible demonstration of its practicability, which has been so long needed, is given. Such a phenomenon, in our times, though overlooked by common eyes, must have more importance to observers of intelligence, who are interested in the good of humanity, than the glittering nothingness which appears on the rapidly changing stage of the great world; by which the good of the human race, if not absolutely impeded, is not one hair's breadth promoted. The public designation, and especially the united voice of upright and intelligent men of experience in all countries, have already taught the readers of this paper to recognize the educational institution of Dessau (the Philanthropinum,) as the only one which bears these marks of excellence; of which it is not one of the least that, by the plan of its organization, it must of itself naturally throw off all the faults which belong to its beginning. The incessant attacks and libels which have appeared here and there, are such general marks of censoriousness, and of the old custom of defending one's self with one's tongue, that the indifference of this sort of people, who always look with evil eyes at whatever shows itself good and noble, would raise a suspicion of the mediocrity of the new claimant of excellence. An opportunity is now given to afford to this institution, which is devoted to the good of humanity, and that deserves the sympathy of all men, assistance, which will be insignificant to each person, but important from the large number. If the invention should be tasked to contrive the means by which a small gift should do the greatest, most lasting, and most universal good, it would be found to be that means by which the seeds of good are planted and maintained, so that they may grow and strengthen themselves with time. According to this idea, and to the high opinion which we have of the number of benevolent persons in this country, we refer to the 21st part of this literary and political gazette, with the appendix; where we find a numerous subscription, from men of standing in the church and

in schools, and especially from parents to whom nothing can be indifferent which will serve for the better education of their children; and even from those who, although they have no children themselves, have heretofore, as children, received education, and who therefore feel the obligation to contribute, if not to the increase of mankind, at least to the improvement of their education. The subscription to the monthly journal issued by the Dessau educational institution, entitled "*Pedagogical Conversations*," is two reichsthalers ten groschen of our money. But as it is impracticable exactly to determine the number of issues, and as thus there might be a further payment necessary at the end of the year, it would perhaps be best (though this is left to the good feelings of each man,) to send a ducat for his subscription; the overplus of which, if he demands it, shall be punctually returned to him. The institution indulges in the hope that there are many liberal persons in all countries, who will gladly seize this opportunity to make the small free-will offering of this surplus over the subscription, as a contribution to its support, while it is yet near being completed, but has not received in time the help which it expected. For since, as Herr O. C. R. Büsching says, the governments of the present day do not seem to have any money for the improvement of schools, it must, unless they are to be entirely broken up, be left to wealthy private persons, to sustain, by generous contributions, these so universally-important institutions.

KANT.

It is remarkable that Kant conceived as great hopes from the Philanthropinum as did Fichte, afterward, from Pestalozzi's institution; and both, led by their amiable benevolence, hoped for too much. Kant perceives this himself, afterward, as appears from the following passage, from his work "*On pedagogy*." He says:*

It was imagined that experiments in education were not necessary; and that, whether any thing in it was good or bad, could be judged of by the reason. But this was a great mistake; experience shows very often that results are produced precisely the opposite to those which had been expected. We also see from experiment that one generation can not work out a complete plan of education. The only experimental school which has made a beginning toward breaking the path was the Dessau institution. This praise must be given to it, in spite of the many faults which may be charged against it; faults which belong to all conclusions based upon such undertakings; and which make new experiments always necessary. It was the only school in which the teachers had the liberty to work after their own methods and plans, and where they stood in connection, not only with each other, but with men of learning throughout all Germany.

In the first part of the "*Pedagogical Conversations*" is found also the letter of "A poor country clergyman in Alsace" to Simon, a professor in the Philanthropinum, whose teacher the clergyman had been. This clergyman was no other than the excellent Oberlin, well known to all. Here is his letter:†

My dear Fritz: You wish to be loved by me as much as you love me? Right; I am glad to have you say so. Judge now yourself whether I love you. I carry your institution in my heart. Oh, how willingly would I devote myself to it; but God requires my services here. How earnestly have I wished to be present in it, if only for a few months or even a few weeks, to hear, to learn, and then to go back, richer than before, to my Steinthal, and finish learning by myself! But my God has quite forbid me; for nothing but my wish is favorable to that wish. I have already been kept poor, and hard pressed; and am so now; even to extremity. O, if we had money, money which is so useless in many hands! So I have thought a thousand times since I have known of the institution at Dessau; and so I and my wife had to think again, when we read the third part of your "*Archives*." We thought of every thing, whether we had not some thing

* Kant's works, Vol. 9, p. 391. Rosenkranz's edition.

† *Pedagogical Conversations*, first part, pp. 97-100

which we could turn into money. I was grieved, for I knew we had not. Then my wife came silently into my study, and with pleasure in her eyes brought me a pair of ear-rings, with the request that I would send them to the Philanthropinum, or their value, if we could sell them. She had given thirty gulden for them, ten or twelve years before. I wrote at once to Herr —, in Strasburg, but without telling him the name of the giver. Now I do not know, my dear friend, whether the ear-rings, or the money paid for them, will accompany this letter. You can imagine how much pleasure I take in these ear-rings. I can feel no regard for such idle things, which cost so monstrous a sum for so emaciated a purse. God gives me bread to-day, and has promised it to me for the future. My friend, besides God and ourselves, no one knows who has made this gift, so little in itself; but the secret is placed fully at your disposal. I do not know what gift could have been made to me, so agreeable as the three copies of the "*Elementary Book*." I hardly know myself; for I had been looking with covetous eyes upon those who could buy them; and I saw no shadow of hope that I could ever buy them; for I and my money-box are quite empty. I try to make this excellent book known wherever I can in Strasburg. My friend, I can speak openly with you; so many copies frightened me and my wife. And I could hardly restrain myself; and had to make an effort to keep from tears. Thanks, and pleasure, and shame, and sorrow at my inability to make a return to the institution and to you, were too strong for me. I can pay you for them, my friend, in nothing but wishes, ardent wishes to my dear God, who keeps me so poor, for you and for your and my care, the institution. Yes, my friend, I hold your vocation and your labor enviable. May God strengthen, bless, and encourage you, and—which I always shall for myself—give you a more tender love for Jesus and for the children, bought with his blood, and so dear to him. Adieu, my dear friend, and all my friends. I remain, even until death, and anew after that, your sincere, willing, and tender friend,

OBERLIN.

Waldersbach in the Steinthal, on the borders of Alsace and Lorraine, March 16, 1777.

In 1776,* the same year in which the examination was held, Campe, then chaplain at Potsdam, took the curatorship of the Philanthropinum, but left it in the following year. After his departure, Basedow was again "director of instruction," and Wölke vice-curator. Trapp, from Altona, became a teacher, but was appointed professor of pedagogy in Halle, in 1778.† Busse, "candidate in pedagogy," and known for his mathematical text-books, and who was afterward professor of mathematics in the mining academy at Freiberg, became a teacher in 1778.

In 1778 there were thirty-three boarders. The plan of instruction was nearly as in 1776, and extracts from Cicero, Terence, &c., were read. "At the last, at the very last," Basedow directs to instruct in the principal heads of grammar. "A very wrong method, in the opinion of most," says he, "but in truth the method of nature and of reason."

* Philanthr. Archives, part 3d. In the same year Simon and Schweighäuser left the institution.

† Trapp received this invitation by the means of the Prussian minister for schools, Von Zedlitz, who was strongly in favor of Basedow. In an address "On patriotism as an object of education," Zedlitz says, "The cuts of Basedow's '*Elementary Book*' should be the first manual for all instructors." They were to be a picture-gallery, by means of which children can easily and clearly be taught the first ideas of civil employments.—"*Pedagogical Conversations*," Vol. 1, p. 604.

German exercises were written. "For each exercise, the author shall receive tickets of industry, according to their value; by which he can earn for himself golden points upon the white table of merit."*

Neuendorf, afterward rector of the school in Dessau, had an especial oversight of the Philanthropinists, whom, upon one occasion, he addressed as follows: "My dear children, we are here a little republic, of which each one of us is a free member. You are my young friends, and I am your older and more experienced friend." Trotzendorf organized his school as a republic, but declared himself, not the older friend of the youths, but the *dictator perpetuus*. Neuendorf, as a follower of Rousseau, was seeking to show his scholars the necessity of laws for their republic.

Turning, planing, and even threshing, were among the branches of instruction.†

While the Philanthropinum made many friends, it did not want enemies. One of them published a romance, "*Spitzbart*," a comico-tragic pedagogical history of this century. Parturiunt montes, nascitur ridiculus mus, 1779.‡ This book had much success. It was directed especially against Basedow. In the third volume of the "*Pedagogical Conversations*" is a commentary by the institution upon "*Spitzbart*." "Although this institute," it says, "is still called the Philanthropinum, it is as unlike the Philanthropinum which Basedow founded and would have carried on, not as a hen to the egg, but as the hen to another fowl. If charges are to be brought against Basedow and his plans, they do not apply to us, because we have not adhered to all of them." They say, again, that they have not let Basedow's work go to destruction, but that they occupy themselves no longer with constructing plans, but with carrying them out.

Criticism had had a good effect, at all events.

As will have been concluded from what has been said, Basedow soon left the institution, and even got into a quarrel with Wölke; it was out of enmity with him that the former refused to have any part in the direction. Wölke was now director, and with him were five professors. In 1781, Salzmann, professor and clergyman at Erfurt, and Olivier, from Lausanne, became teachers. The former was also chaplain; and, as such, published, in 1783, "*Divine services*, held in the chapel of the Philanthropinum."

* In 1782 four pupils were admitted to the Order of Industry.

† See appendix for full order of exercises.

‡ The same professor Schummel, who earlier, while a teacher in the girls' school at Magdeburg, had attended the examination at Dessau, and had written "*Fritz's Journey*," was the author of "*Spitzbart*;" "A satire," says his biographer, Menzel, upon the Philanthropic scheme of education which he had previously subscribed to." The work was perhaps the result of a reaction from his first excessive valuation.

In 1782, Matthisson, the poet, and Spazier, became teachers in the Philanthropinum. At this time there were fifty-three boarders, from all countries of Europe, from Riga to Lisbon.

Salzmann left Dessau, in 1784, and, with the assistance of the Duke of Gotha, founded his well-known institution in Schnepfenthal.*

From the year 1778 Basedow taught privately in Dessau, and gave great offense by many vulgarities, especially by drunkenness. He got into very violent open quarrels with Wölke, and even into a law-suit, which was ended, in 1783, by a reconciliation. He again wrote many theological treatises. In 1785, he supervised the second edition of the "*Elementary Book*," and wrote "*On the method of teaching Latin by the knowledge of things*;" and also upon learning to read. In 1786, he published "*New Assistant for Teaching Reading*, for the knowledge of God, and for the necessary correctness in language; by Basedow, and a society laboring for enlightenment;" and also "*New Assistant for the suitable enlightenment of scholars by teachers of the middle classes*." A strange title! The book is intended to contain lessons in virtue and the principles of practical wisdom. From the year 1785, Basedow was accustomed to take a yearly journey to Magdeburg for a few months, and to teach there in a family school. While there on his third trip, in July, 1790, he was seized with a hemorrhage. Feeling that his end was near, he dictated some additions of his will, took an affectionate farewell of his youngest son, and died, in the full possession of his faculties, on the 25th of July, aged 66 years, 10 months, and 14 days. His last words were characteristic: "I desire to be dissected for the benefit of my fellow-men." He was buried in the church of the congregation of the Holy Ghost. He was twice married. His first wife died in Sorø; with the second, a Danish woman, he lived thirty-three years, until her death in 1788. She was of a very melancholy disposition, and was especially affected by the excommunication of her husband in Altona. Emilie, his daughter, whom we have so often mentioned, married, in 1789, a clergyman named Cautius, who lived near Bernburg.

Let us return once more to the Philanthropinum.

There is so much that is strange and remarkable in the information which I have given, that the whole seems almost a pedagogical caricature. Yet it would be, in the highest degree, unjust to

* The authentic accounts in my possession, come down only to 1784; so that I am obliged to break off at that point. The "*Pedagogical Conversations*" ended with their 5th year, 1784. In 1796, at the age of thirteen, I came to Dessau, and there saw several of the teachers of the Philanthropinum; Dutoit, the enthusiastic follower of Rousseau, Basse, Wölke, and Neuen-dorf. I was especially often in the house of the honest, benevolent, and enthusiastic Olivier; of whose important method of reading I shall hereafter speak.

keep in the back-ground the good qualities of the institution, and of its managers.

As it regards the teachers in the Philanthropinum, whatever differences there may be in estimates of them, we must recognize with honor their honest and unselfish purposes; and even for that of Basedow, in spite of his shameless begging for plans which his brain, which, says Göthe, would not let him rest day or night, incessantly brought forth. He died poor, and while dying requested to be dissected for the benefit of his fellow-men. Even his boasting habit of promising impossible things, and even asserting them to have been done, at the Philanthropinum, to the great after injury of the institution, may well be ascribed in part to a rude enthusiasm for his plans. Most of the teachers gave themselves to their work with self-sacrificing love, and with their whole hearts. With what unwearied and vivid activity did Wölke labor! Olivier, to his death, felt a youth's enthusiasm for his vocation as a teacher; and the honest, conscientious, and persevering activity in teaching, of Salzmann and Campe, is well known.

Was then all the labor of these men in vain, and even more than in vain? Certainly not. To convince ourselves of this, however, we must, as in forming our estimate of the character of Rousseau, take into consideration the character of the pedagogy of that time; not as it was exhibited in the single cases of eminent philologists, but as it prevailed upon an average taken through most of the schools. The time of youth was then, for most of them, a very miserable time; and the instruction was hard and heartlessly strict. The grammar was whipped into their memories, as were also texts from Scripture and hymns.* A common school punishment was the learning by rote of the 119th Psalm. The school rooms were miserably dark; it was a wonder that the children could work with pleasure at any thing; and no less a wonder that they had any eyes left for any thing besides writing and reading. The godless age of Louis XIV also inflicted upon the poor children of the higher ranks hair frizzled with powder and smeared with pomade, embroidered coats, knee-breeches, silk stock-

* Pedag. Convers., Vol. 3, p. 467. In this place is the following item: "About this time died Häuberle, *Collega jubilaeus* at a village in Suabia. During the 51 years 7 months of his official life, he had, by a moderate computation, inflicted 911,527 blows with a cane, 124,010 blows with a rod, 20,969 blows and raps with a ruler, 126,715 blows with the hand, 10,285 blows over the mouth, 7,905 boxes on the ear, 1,115,800 raps on the head, and 22,763 *notabenes* with the Bible, catechism, singing-book, and grammar. He had 777 times made boys kneel on peas, and 613 times on a three-cornered piece of wood; had made 3001 wear the jackass, and 1707 hold the rod up; not to enumerate various more unusual punishments which he contrived on the spur of the occasion. Of the blows with a cane, about 800,000 were for Latin words; and of those with the rod 76,000 were for texts from the Bible and verses from the singing-book. He had about 3,000 expressions to scold with; of which he had found about two-thirds ready-made in his native language, and the rest he had invented himself."

ings, a sword at their sides; all of which was the severest torture for young and active children.*

Like Kant, F. H. Jacobi, Euler,† and others, conceived at first great hopes from the institution, and that gained great reputation and received assistance, in and from all parts of Europe. The unnaturalness of much that was usual was so strongly felt, and there was so strong a desire after freedom, after what may be called natural in the best sense of the word, that, as Kant says, there was a powerful wish not only for a reformation, but for a revolution, for the freedom of youth.

Rousseau's oratorical exhortations had caused much attention to be paid to the more intelligent management of little children; mothers nursed them themselves, and many effeminate habits were avoided.

In the Philanthropinum, the same principles were followed in educating boys; and bodily education was attended to in a manner which had never been any where seen before. ‡

The preposterous and painful clothes of boys, embroidered coats, breeches, curling, and hair-bags, were all done away with. It may be imagined how delightful it must have been to the boys, to be let out of their tormenting dress—coats, breeches, and cravats—permitted to wear the most convenient sailor's jackets and pantaloons of striped blue and white tick, to have their necks free and their collars turned down,§ to be quite rid of the smear of powder and pomade in their hair, and of their hair-bags. A report of the institution for 1779 says, "If parents insist upon it that the hair of their children shall be daily dressed and powdered by the usual barbers, the institution can not answer for the purity of their characters; for, by means of the barbers, they can easily establish a connection with immoral persons, &c." This appeal was efficient.

Care was taken that the body should be disciplined and hardened.

* Most of the children can be judged of by the cuts in the "*Elementary Book*." Of the influence of the unnatural French manners upon the German girls, Göthe has given a vivid representation in a scene of the earlier edition of "*Erwin and Elmire*." See his works, first edition, Vol. 34, p. 211.

† This great mathematician was the author of the favorable testimony which the Academy of St. Petersburg published, upon Basedow and the Philanthropinum, in 1775. Basedow had sent his book, "*The Philanthropinum*," to St. Petersburg. They say, "The academy considers this work worthy of its praises. It applauds in particular the cordial zeal with which the author is penetrated for the good of the human family; and, as the plan of education and the method of instruction for the young, which is therein proposed, is in several respects preferable to those which have been followed hitherto, the academy has no doubt that if it shall be carried into execution, and imitated by other institutions, there will result a material advantage to the public."

‡ What had been begun in the Philanthropinum was carried further by Gutsmuths, in the Salzmann institution, at Schnepfenthal. Gutsmuths indeed shows himself, in his gymnastics, the forerunner of Jahn.

§ This was the custom of the children under the care of Olivier, when I saw them in 1796.

The boys learned carpentering and turning, wrestled in the open air, ran foot-races, &c. As the instruction proceeded as much as possible from actual seeing, the training of the eyes was not neglected.

Here also should be mentioned the fact that the Philanthropinum, and the teachers who adhered to its principles, made special efforts for the prevention of certain frightful secret practices.

As to instruction, the teachers of the Philanthropinum did many great services to it.

It was one of their favorite principles, that the scholars should learn with love and not with repugnance. In this they were certainly right, although they made many mistakes in their method of inspiring this love of learning. They severely blamed the unloving indifference of so many teachers toward their pupils, and toward their pleasure or displeasure in learning. That teacher will accomplish most, whose work is adapted at once to the growing natural gifts of his scholars, and to their weak conscientiousness. To have regard only to the natural gifts of the children leads to a servile following of them; to make demands upon their conscientiousness only, and to overlook and neglect their individual endowments, leads to the tyrannical practice of requiring every thing from all alike. In the first of these cases, the wills of the children are left to themselves, and they are treated only as personified powers, vegetating and developing themselves; which the teacher must follow only, and to which he must subject himself entirely. In the second case, on the other hand, they are regarded as personified wills, and they are required to will and to do all things, even the impossible; as if one should require a blind man to become a painter by the power of his will. In the Philanthropinum, the ethical element was comparatively neglected; the pleasure and wishes of the children was too much consulted, and their conscience and wills too little called into activity; even a wrong vanity was put in requisition.* This may well have happened in opposition to the already mentioned caricaturized character of the ancient pedagogy, and its extreme severity, which commanded and set lessons recklessly, in reliance upon punishment, had reference neither to the pleasure nor the consciences of the children, and would carry all things through by fear.

I now proceed to consider the method followed in the Philanthropinum in giving instruction on different subjects.

In teaching language, Comenius was followed in this respect, that

* In the fourth collection of "*Worshipping Exercises*, holden in the chapel of the Philanthropinum," the exercises are given, with which seven pupils were admitted to the Order of Industry.

the teaching of words of foreign languages was as much as possible united with the inspection of the things designated by his words. At the examination in French, the teacher showed the picture of a harrow and called it *herse*. The word was to be impressed upon the memory by seeing, and the sight by the memory. The "*Elementary Book*," like the "*Orbis Pictus*" before it, aimed at such a united knowledge of things and their names, in different languages.

A second distinction between the instruction in languages at the Philanthropinum and that elsewhere was this, that foreign languages were taught, first by speaking them, and next by reading. The grammar, which in other schools was always made the beginning, was not brought in until a late period. But this is not entirely new. In this way, as we have seen, Montaigne learned Latin; Ratich placed the reading of Terence before the grammar; and Locke's principles were similar. Basedow and Wölke, however, were accustomed to cite, principally, various places in Gesner's "*Isagoge*;" in one of which it is said, that it is a hundred times easier to teach a language by use and practice, without grammar, than it is to teach it by grammar, without use and practice.

To avoid repetition, I omit here the full discussion of this pedagogical controversy; I shall hereafter have occasion to take it up in my account of the Hamiltonian method. I will only remark that, so far as I know, no philologist of eminence proceeded from the Philanthropinum. This is the less to be wondered at, since Basedow himself must have been entirely destitute of all susceptibility to the grandeur and beauty of the ancient classics; and, by his own confession, studied the dead languages industriously himself, and caused them to be diligently studied by others, only because otherwise the Philanthropinum could not be kept in existence.

The instruction in arithmetic seems to have been very good; at least the manuals of Busse, the professor of mathematics, have had much reputation. In geometry, the views of Rousseau appear to have been followed; who, as we have seen, insisted much upon drawing the geometrical figures as neatly and accurately as possible. This was entirely correct. Nowhere is the imposing principle of "Spiritualism" less appropriate, than in the instruction of youth. This spiritualism despises the form, and immediately requires the idea; whereas the young need the best and truest representations, as being the symbols of the clearest and truest ideas.

I possess a collection of geometrical drawings on pasteboard, which were used for instruction in the Philanthropinum. In these, nothing is omitted which can make the representation more correct, or the

demonstration more easy. Even painting, in the names of the separate parts of the figures, is employed; and some of the triangles can even be taken out of their places, to show how they may be placed upon other triangles. The great Euclid certainly would not have used the word "cover," unless he had actually laid one figure upon the other.

Upon the instruction in geography, natural history, and physics, we may give some particulars from the "*Elementary Book*." The geographical instruction is arranged in two courses, but offers nothing special. But the strange political and religious remarks of the author, repulsive to men, and wholly unintelligible to children, are worthy of attention. Of the method, of procedure, he says, "It is a practical method to begin with a sketch of a room, a house, a town, and a well-known neighborhood; and then to go on to the map of a country, and so on to a continent." This is after Comenius, and Rousseau; but I do not know whether this method was actually followed.

To the geography, in the "*Elementary Book*," is subjoined a somewhat confused universal history, which is mingled with all manner of inappropriate observations; and this is followed by portions of mythology, narrated in the most vulgar and disgusting manner.

The natural history, in the "*Elementary Book*," contains one thing and another from the three kingdoms; and rather more from physics and astronomy. The structure of the human body is also considered. Many absurdities are attributable to the condition of natural science at that day. There is also a technology, containing a description of the most common trades and arts.

All these things were subjects of instruction at the Philanthropinum, where the "*Elementary Book*," indeed, was in its proper place. The numerous representatives from nature and art, which were placed before the children, like pictures passed before them in a magic lantern, must have been a great diversion to them; but how wearisome, on the other hand, must have been the homilies which they had to endure on morals, politics, and religion! Basedow had not bestowed any thought upon the questions, what was appropriate for boys in this country; what stimulates them; what they can understand; what appeals to their hearts? Not less than sixty-one pages, in the "*Elementary Book*," are occupied with "Fundamental Ideas of Politics," which tell about a certain Democratus, who lived in the country of Universalis; of a great Count Aristocratus; of actionable injuries, &c.

Religion is the foundation of education; upon the solidity of this foundation depends the excellence of the whole building. Basedow's No. 14.—[Vol. V., No. 2.]—33.

house was built upon the sand; and, notwithstanding the beautiful execution of some of its parts, it was, therefore, uncomfortable and insecure. What we find on this subject, in the "*Elementary Book*," and in the other writings, which have proceeded from the Philanthropinum, go beyond any thing hitherto referred to. We expect to find in them only a tiresome rationalism; and it is with wonder that we discover more. I shall cite a few examples.

Wölke quoted, with approval,* some remarks of a third person, which begin thus: "To-day I revealed to Fritz the existence of a God. For a long time, I have been preparing him for this important occasion; especially by carefully directing his attention to every thing in nature, and leading him to guess at causes wherever he noticed results." The narrator had not taken the boy out of the village for four days, that on the fifth he might be more impressive and attentive, when God should then, for the first time, be named to him as the creator of the sun, &c. Here Wölke adds this observation: "One who desires to make the impressions of such an occasion still deeper, and to raise still higher the pleasure felt at the beauty of nature, and in its creator, must stay at home for a still longer time, with his pupil, in a room whose windows are shut close, day and night, and which is lighted only by a feeble lamp. But the pupil must know nothing of the design, and during this last day must be kept busily and pleasantly occupied." The Fritz of this account had, up to the appointed day, never heard the name of God; or, at least, ought not to have heard it; and is first made acquainted with prayer, after this day of revelation; having before been taught to thank his father or guardian only, after meals, for his food and drink.

Something of the same kind is found in the "*Elementary Book*."† In this the passage from "younger childhood" to "elder childhood" is thus described:—

The parents issue preparatory orders, relating to the change, as well in the relations of the child as of the deportment of others toward him; and in relation to the festivities of the day. These are previously explained to the child, a part at a time, and he is practiced, by preparatory exercises, in the behavior proper for so great and honorable an occasion, also with the admonition, that too childish conduct may cause a postponement of the day selected. The day comes. He rises, once more, as a little child. A few of his mother's friends come in, with pleasure, to assist in putting on his new clothes. An uncommonly good breakfast is provided. All his old toys, &c., are collected and thrown away, and his new ones brought out, together with his clothes. The child is congratulated upon having advanced to this period. He is taken up into a church, and is taught what is the purpose of the assemblies, which meet there; but not yet in the peculiarities of his national religion. They return home. The father offers a short prayer for his child; and a pair of good singers sing an appropriate stanza. After a few questions by the parents, and answers by the child, the rod is burned in the fire. Now, for the first time, the child prays, kneeling, and after a form. The

* Pedagogical Conversations, 3d vol., p. 146. † Part I, pp. 87-90.

father prays again, with a hand, for benediction, upon his child's head. The singing of a final stanza concludes the more serious part of the solemnity. All go into the house, and some guests, with their children, offer their congratulations upon the change. After this, until 8 o'clock in the evening, the company of children are entertained, and made to enjoy themselves, after their fashion, but with such games as are agreeable to others, and not too noisy; as any other would not be suitable to the solemnity of the day. At evening, the mother prays, with her hand, for benediction, upon the child's head. Next day, the tutor prays for the child, and over him, and gives him, in the name of his parents, a beautiful set of tablets, bound in red, and whose vignette represents a whole company of children, following their teacher in prayer. During the day of this festivity, at each item of the arrangements, its reason is explained to him. For example, the reddish binding is for a reminder of modest sincerity, in which, for one occasion and another, children should be trained, even at so early an age, etc., etc. In this manner does the little child become an older child.

What was Basedow's ideal of divine worship will appear from the following:—

For the weekly, and other less extraordinary solemnities of the family, a chamber should, if circumstances permit, be consecrated; that is, set apart for this sole use. Each object in it is instructive and significant to this end; for example, the ceiling signifies heaven, or the elevated happiness of the virtuous after death, and is so finished as to inculcate this idea. The chief color of the walls is striped with black stripes, to represent the preponderance of good over evil, in this life. The middle of the carpet has the figure of a coffin, for the sake of increasing wisdom, by reminding men of death. In the highest place, behind the speaker's seat, is a box, in which is kept the book of God's laws and promises. The cover of the box has a mirror in it, to indicate the necessity of self-examination, according to God's law. At the sides of this box burn two wax candles, to signify the two methods of acquiring religious knowledge, by the instruction of others and by our own insight. Over the box, on the wall, are represented, in statues, pictures, or words, the four cardinal virtues; prudence, moderation, justice, and benevolence. These means of instruction are to be employed at the beginning of every service, with the help of certain words, and gestures, and of the liturgy. All who enter this chamber must be cleanly clad; and no one in it must turn his back to the box.*

After a variety of other particulars, he adds: "For setting forth a domestic liturgy and ceremonial, a whole book would be required. True, many would think ill of the purpose of such a work; would laugh at it, and revile it. Let them do so. Even for its own advantage, posterity has decided in favor of the Copernican system." Compare these fantasies with Luther's homely directions for the father's devotions with his family! Basedow, as a follower of Rousseau, seems to have been led into these singular details by one remark in "*Emile*." This is, "We depend too much upon the unassisted reason; as if men were minds only. In neglecting the language of symbols, which speaks to the imagination, we neglect the most impressive part of language. The impression of words is always feeble; and the heart is better addressed through the eye than through the ear."

To the strange rhetoric of Basedow's incoherent religious addresses are subjoined hymns of a very appropriate character. For a speci-

* Same, part 2, pp. 110, 111, 113. But this worship is described only in Basedow's "*Alethinie*." It reminds us much of "*Wilhelm Meister*."

men, I give the following, from a collection entitled "The whole of natural religion in hymns."*

No mortal being knew me yet,
Within my mother's womb!
Not even herself! She but believed
I was a human child!

There lay I, all prepared, I!
With soul and flesh, all I!
I, now a child, and soon a man,
Prepared completely there!

Thus, then was I prepared, I!
Not by my parents' plan!
But he who shaped me to his mind,
He was my God, my God!

'T is God who shapes the milk-soft form
From out of drink and food;
Who changes these, and makes them blood;
And sends the blood around.

The body uses what it needs,
And what would harm, rejects!
By lungs, and by magnetic skin—
Thus works, thus works my God!

Thou, God, of father hast no need
To make the human form.
No generation, and no birth,
My primal father had.

The wind thou leadest on its way,
Teachest the air to move.
That one may speak, another hear,
And both may understand.

In thinner, or in thicker air,
No sound nor life could be!
Father of life, thou causest it
In measure just to stay!

In the place of a Christian, renewing faith, enlivening for time and eternity, was thus constructed a human, superficial, lifeless, and absurd patchwork of natural religion. From such a barren seed could never grow a plant to bear fruit, both in time and eternity.

From the Dessau Philanthropinum a great pedagogical excitement and agitation spread over Germany and Switzerland, and, indeed, over a great part of Europe. This is evident, both from the list of the patrons of Basedow's "*Elementary Book*," and from the fact that boys were sent to his school from all quarters, from Riga to Lisbon.

Educational institutions, on the model of the Philanthropinum, arose in all quarters. Ulysses von Salis first established one, in 1775, at Marschlins, in Switzerland. He selected for its principal the well-known Dr. Bahrdt, who had been professor of theology at Giessen, but was about being sent away for his heterodoxy. Salis and Bahrdt,

* The original is not rhymed. (*Translator.*)

however, had a disagreement within a year, and the latter accepted an appointment from Count von Leiningen, as superintendent at Durkheim. The count, at the same time, gave him the occupation of Castle Heidenheim, for the erection of a philanthropist institute. But this feeble institution expired after three years, (in 1779,) Bahrdt being deposed by the royal council for theological error. By the assistance of Teller, however, he found an appointment at Halle, under the protection of the minister, Zedlitz.

Campe founded a third institution, in Hamburg, after leaving Dessau. This he left, in 1783, to the care of Trapp, who, however, seems to have let it quite perish, for he went to Wolfenbüttel, in 1786. Salzmann's Institute, founded in 1784, existed longest, and still exists. Among the teachers and pupils of this institution, have been such men as Gutsmuths and Karl Ritter.

The Philanthropists exerted an influence, not only through these institutions, but through a multitude of authors, for young and old, who swarmed all over Germany. At the head of the teachers who wrote, stands Campe. The most successful of his writings was "*The Swiss Family Robinson*," (*Robinson der Jüngere*.) He seems to have been induced to write this by Rousseau's strong recommendation of the "*Robinson Crusoe*" of Defoe, as a book for children. But Campe's *Robinson* is far below its original, and is much weakened and diluted, by the sapient observations of the children, and weak and silly preachments about morals and usefulness. Campe's books on travels also had much success, especially that upon the discovery of America; although even this truly poetical material was injured by tiresome disquisitions, doubly tiresome for children. Campe's purely ethical writings for children, like his "*Theophron, or the Experienced Counselor of Youth*," must have been unendurable to a sprightly boy. "As soon as Campe's *Robinson* came into the hands of all children, of the educated classes, the biblical histories disappeared. In consequence, there came up, besides the practical prose of our youthful relations, a theoretical element of them. There grew up a generation of youth, who regarded nothing but what was material, domestic, or of immediate use in the external relations of life; and full of childish pertness."* When the poisonous wind of the desert blows, all the fresh, green, tender plants, quickly fail and wither. But many children escaped the fatal effects of the pedagogical Simoom, which, at that time, blew from France over Germany.

Among Campe's works for teachers, his collection of writings on

* Schlosser, ("*History of the Eighteenth Century*," 3, 2, 163.) in his excellent character of Campe. My own vivid recollection of the effect upon myself, when a boy, of these juvenile books, fully coincides with his remarks upon them.

the whole subject of schools and education must be placed first. He was assisted in this undertaking by educators and instructors of like views with himself, Resewitz, Elers, Trapp, &c. This includes translations of Locke's "*Thoughts on Education*," and Rousseau's "*Emile*," and it deals with the most important pedagogical problems; especially those upon which the old and new schools in education are at variance.

After Campe, Salzmann was the most influential of this class of pedagogical writers.

Their restless activity gave the Philanthropists great influence upon the educational systems of Germany. They attacked in all ways the old schools; who, on their part, sheltered themselves behind received principles, and often made successful attacks upon the many weak points exposed by the assailing Reformers.

Notwithstanding this hostile attitude, however, the old schools could not wholly avoid the influence of the Philanthropists. Some rectors of gymnasia even passed over to the ranks of their opponents; as Gedike, rector of the Gray Friars' Gymnasium, at Berlin. In an ode* to Basedow he says:—

Thou North-Albion's son, lighted the sparkling torch,
Flung'st it aloft with a Hercules' mighty arm—
Many ran toward thee, kindled their lights from thine,
Brighter and brighter the light of the torches shone,
Till the very snorers rose,
Rubbing their sleepy, blinking eyes.

Gedike also assisted in Campe's collection of educational writings. Being a man naturally inclined to the older schools, a legitimist, he would have been doubly welcome to the Philanthropists, could he have been ranked as an able philologist even by the humanists. He was, moreover, much too rough as a teacher.

Far above him, though a cotemporary, stands Meierotto, the able rector of the Joachimsthal Gymnasium, at Berlin. His brethren called him the Frederic the Great of the rectors. He never wrote any odes to Basedow, but was indefatigable in his efforts to secure instruction in drawing in his gymnasium, a cabinet of natural objects collected there, an area with apparatus for gymnastic exercises; and thus proved himself an honorably sincere and earnest educator, and intelligently acquainted with the new pedagogy.

The isolated, independent labors of the Philanthropists grew weaker and weaker toward the end of the eighteenth century;† and, in the beginning of the nineteenth, a new epoch of reform commenced with the establishment of the Pestalozzian institution at

* Not rhymed. (Translator.)

† Only Salzmann's institution, at Schnepfenthal, as we have seen, outlasted the century.

XII. JOHN BROMFIELD.

JOHN BROMFIELD, a large donor, during his lifetime, to the Boston Athenæum, and a liberal benefactor to important and interesting objects of charity and usefulness in his last will, was the last representative in America of the male line of a family distinguished for more than a century among the citizens of Boston, for integrity and benevolence. He was born in Newburyport, Mass., on the 11th of April 1779. His early years were passed with his brothers and sisters under the pressure of misfortunes involving great pecuniary restraint, and relieved only by the indomitable spirit of their mother. He received his early education from his mother, which was continued at Dummer Academy in Byfield, in 1792, where his habits were so studious and his scholarship was so satisfactory, that his friends were advised to send him to the University; the means for which were kindly proffered by his father's sisters. With a firm spirit of independence, which marked his whole career, he declined with grateful acknowledgments the kind offer, saying that he was resolved to make his own way to fortune, as a merchant.

He accordingly entered the counting-house of Larkin & Hurd, of Charlestown, and subsequently, during his apprenticeship, that of Soley & Stearns. On the failure of this house just as he became of age, he assumed the settlement of their concerns without reward or the hope of it. Not obtaining mercantile employment immediately, and dreading to be idle, he arranged with a master carpenter to teach him his trade, when he was offered a situation as factor for a mercantile house. His duties took him twice to Europe, after which, in 1809, he was associated with William Sturgis as supercargo of the ship *Atahualpa*, owned by Theodore Lyman, and bound for Canton. On arriving in Canton River, the vessel was attacked by pirates, and bravely and successfully defended by officers and crew. He remained in Canton one year, as agent, and there laid the foundation of the fortune which he subsequently acquired by persevering industry in safe commercial and financial transactions in Boston.

By careful investments of his earnings,—by avoiding all extra hazardous, although promising enterprises,—by living always within his income, and limiting his expenditures to a moderate scale for his own wants, and a liberal charity to others, he gradually executed his plan

* Abridged from a Memoir in Quincy's History of the Boston Athenæum.

of life, attained independence for himself, and the power of conferring important benefits on others, and the public. His kind acts and charitable contributions, though secret, were constant, discriminating and liberal. To the general claims of pauperism he listened dubiously, and often with disregard, being of opinion that indiscriminate charity was one of the fruitful causes of the state it pretends to relieve. Books were his constant source of occupation and amusement. In their company he felt not the want of general society.

As his property increased, his desire of usefulness increased with it. In 1845 he placed in the hands of Josiah Quincy, senior, \$25,000 "to be delivered to the proprietors of the Boston Athenæum for the purpose of constituting a fund to be kept separate and distinct from all other funds, and to be put and kept out at interest on good security, for the regular increase of the library of the institution; three-fourths of its annual income to be annually applied to such increase of the library, and the remaining one-fourth to be annually added to the capital fund, for the increase thereof."

Mr. Bromfield died on the 8th of December, 1849, in the 70th year of his age. His property was found after his death considerably to exceed two hundred thousand dollars, invested with great judgment and care, and was distributed by his last will with a wisdom and precision altogether in unison with the principles and habits of his life. Having fulfilled to the utmost the duties of affinity, affection, and friendship, he devoted his remaining ample resources to the service of the public, giving

To the Massachusetts General Hospital, and to the McLean Asylum in equal shares,	\$ 40,000
" Massachusetts Eye and Ear Infirmary,	10,000
" Boston Female Asylum,	10,000
" Asylum for Indigent Boys,	10,000
" Farm School at Thompson's Island,	10,000
" Asylum for the Blind,	10,000
" Seamen's Aid Society,	10,000
" Town of Newburyport, for its improvement and ornament,*	10,000
	\$ 110,000

By these noble and generous benefactions to the public, Mr. Bromfield erected an enduring memorial to his own virtues, and to a name of which he was the last representative.

* The following are the provisions of Mr. Bromfield's will in relation to this subject: "I order the sum of ten thousand dollars to be invested, at interest, in the Hospital Life Insurance Company, in the city of Boston, so and in such manner as that the selectmen or other duly authorized agents of the town of Newburyport, for the time being may annually receive the interest which shall accrue or become payable for or in respect of said deposit; and I direct, that, by or in behalf of said town, the interest so received shall be annually expended,—one-half in keeping the sidewalks in the public streets of said town, in good order, and the other half in the planting and preserving trees in said streets, for the embellishing and ornamenting of said streets for the pleasure and comfort of the inhabitants.

XIII. JOHN HARVARD.

JOHN HARVARD, the earliest and, judged by the magnitude of the results which have flowed from the timely bequest of "two hundred and sixty volumes of books" and "about eight hundred pounds in money" to the college which bears his name in Cambridge, Massachusetts, the greatest benefactor of learning in America, was born in England and educated at the University of Cambridge, having entered Emanuel College, a pensioner, on the 17th of April, 1628, commenced bachelor of arts in 1631, and took the degree of master of arts in 1635. And this is all that is now known for certainty of his birth and life prior to his emigration to New England, in 1637. On the 6th of August, 1637, he was admitted an inhabitant of the town of Charlestown; and, with his wife Anne, a member of the church, on the 6th of November, in the same year. In the division of town lands, both in 1637 and 1638, he was allotted a share; and, in April, 1638, was appointed by the town one of the committee "to consider of some things toward a body of laws" for the town; and, at the same time, it appears on record that he was a "minister of God's word." On the 14th [24th N. S.,] of September, in that year (1638,) he died, having been but one year in the country; and yet, during that brief period, by his manner of life, and especially by the "opportunity of his death," he received from the chroniclers of the time, the epithets of "reverend," and "godly," and gave his name into the imperishable keeping of history, not only as "a lover of learning," but as its true and efficient patron throughout all ages.

The catalogue of his library,* consisting of two hundred and sixty volumes, still exists among the archives of the seminary, and indicates not only his professional studies, but also his general scholarship. Besides a formidable array of veteran champions of the ancient church militant, such as Ames and Aquinas, Bellarmine, Beza and Broughton, Chrysostom and Calvin, Duns, Scotus and Luther, and Pelagius, there are works of more general literature, such as Bacon's and Robinson's *Essays*, Bacon's *Advancement of Learning*, Minsheu's *Guide to the Tongues*, Heylyn's *Geography*, and Camden's *Remains*; all works, at that time, of recent publication. The classical department of his library was even more rich and select. In it were

* Quincy's *History of Harvard University*, Vol. I., p. 10.

Homer, Isocrates, Lucan, Plutarch, Pliny, Sallust, Terence, Juvenal, and Horace; the last with Stephanus's "*Notes*," and a folio commentary. Such are the only indications that remain of the library and intellectual tastes of John Harvard.

The scanty record of this period leave some doubt as to the value of his estate—but, whether it was more or less, he left "one-half of his whole fortune" to "the school," which the general court had resolved to establish out of the funds to be raised by a rate, for the general purposes of the colony.

The following is the vote passed on the twenty-sixth of October, 1636.

The court agree to give four hundred pounds toward a school or college; where of two hundred pounds shall be paid the same year, and two hundred pounds when the work is finished, and the next court to appoint where and what building.

The year ensuing, (1637,) the general court appointed twelve of the most eminent men of the colony "to take order for a college at Newtown." Notwithstanding the sum demanded for the establishment of the school or college was "equal to a year's rate of the whole colony," yet, such were the poverty, danger, and disunion of the time, it would have been impossible for the trustees or committee to have carried the design of the court into effect, had not the comparative stranger, John Harvard, bequeathed to "the school" a sum twofold the governmental grant, or rather promise. The amount realized out of this bequest, according to the imperfect records of the college, and the traditions and historians of the time, was "about eight hundred pounds." This sum was immediately available, and enabled the trustees to *begin* the building, and the books were the foundation of the structure which was to be reared within its walls, "without the noise of the hammer." But the example of Harvard was worth a hundredfold the money value of his bequest to the infant seminary, in the spirit which it awakened among magistrates and people. "It fell like an electric spark upon material of a sympathetic nature, exciting immediate action and consentaneous energy. The magistrates caught the spirit, and led the way by a subscription among themselves of two hundred pounds, in books, for the library. The comparatively wealthy followed with gifts of twenty and thirty pounds. The needy multitude succeeded, like the widow of old, 'casting their mites into the treasury.'

"The early records of the college indicate the universality of the will, at the same time that the nature of the gifts exhibit, in a strong light, the simplicity and the necessities of the period. 'When we read,' says Peirce,* the learned and laborious historian of the uni-

* History of Harvard University, p. 17.

versity, 'of a number of sheep bequeathed by one man, of a quantity of cotton cloth worth nine shillings presented by another, of a pewter flagon worth ten shillings by a third, of a fruit dish, a sugar spoon, a silver-tipped jug, one great salt, and one small trencher-salt, by others; and of presents or legacies, amounting severally to five shillings, one pound, two pounds, &c., all faithfully recorded with the names of the donors, we are at first tempted to smile; but a little reflection will soon change this disposition into a feeling of respect and even of admiration.'

"How just is the remark of this historian! How forcible and full of noble example is the picture exhibited by these records! The poor emigrant, struggling for subsistence, almost houseless, in a manner defenseless, is seen selecting from the few remnants of his former prosperity, plucked by him out of the flames of persecution, and rescued from the perils of the Atlantic, the valued pride of his table, or the precious delight of his domestic hearth;—'his heart stirred and his spirit willing' to give, according to his means, toward establishing for learning a resting-place, and for science a fixed habitation, on the borders of the wilderness! The inhabitants of the country contributing from their acres, or their flocks; those of the metropolis from their shops and stores; the clergyman from his library, and the mechanic from his tools of trade! No rank, no order of men, is unrepresented, in this great crusade against ignorance and infidelity. None fails to appear at this glorious clan-gathering in favor of learning and religion.

"At this period it would be in vain to attempt to recall from oblivion the names of men, some of whom, it appears by the record, made it the condition of their gifts, that they should be unknown; and none of whom looked, or sought, for other applause than that which

'Lives and spreads aloft by those pure eyes
And perfect witness of the All-judging, —
As he pronounces lastly on each deed.'"

Edward Everett, at a public dinner, on the 8th of September, 1836, in commemoration of the close of the second century from the foundation of the college, thus expressed the feelings of gratitude, pride, and veneration with which, not only the sons of Harvard, but the scholars of the land generally, look back on the history of the institution which bears the name of John Harvard:—

"It has stood for more than six generations, by far the oldest institution of this character in the United States. It has stood unchanged, except to be enlarged and improved, and has reared its modest head amidst the storms which convulsed alike the mother country and the

colonies. Neither the straits and perils of the infant settlement, nor the harassing Indian and French wars, nor the political vicissitudes, the sectarian feuds, the neglect, the indifference, or hostility of the parent country toward America, the trials of peace or of war, essentially obstructed the steady course of its usefulness. It has adapted itself, in each succeeding period, to the wants and calls of the age, as they have been felt and understood; and has sent out generation after generation, in the various professions, in the active and contemplative callings, in the higher and the humbler paths of educated life, to serve and adorn the country. The village schoolmaster, the rural physician, lawyer, and clergyman—ministers all of unambitious good—not less than those whom Providence calls to the most arduous and responsible posts, have been trained within its walls. They have come up here for instruction, have received it, have gone forth, and have passed away; the children have occupied the halls which the fathers occupied before them, and both have been mingled with the dust; and here the college, which guided them all till they were ready to launch on the ocean of life, still stands like a pharos founded on a sea-girt rock. The moss of time gathers on it; the waters heave and break upon its base; the tempest beats upon its sides; but in vain. Sometimes its lofty tower is reflected fathom deep in the glassy summer sea, and sometimes covered with the foaming surge, which combs and curls from the foundation, and breaks in a vaulting flood over its summit. Unquenched and steady it shines alike through the tempest and the zephyr. Convoys sweep by it, guided by its beams to fortune or disaster, but its light never wavers. The hand that kindles it fails, but another and another renews its beams. Useful alike to small and to great, the poor fisherman marks its friendly ray from afar, as he shoots out at dusk to try the fortune of a lonely evening hour upon his favorite ledge; and the mighty admiral descries it, through the parting thunder-clouds of midnight battle, and fearlessly braces his straining canvas to the gale.

"It was the practice of the ancient historians, in giving an account of important deliberations, to represent, in the form of speeches, ascribed to the principal personages, the arguments which might have been adduced in favor of, or against, the measures adopted. The question of an appropriation for founding the college, the event which we this day celebrate, was for some considerable time before the general court, but no account has reached us of what was said on either side. It is not difficult, however, to conceive what would be the general line of argument of such a man, for instance, as Governor Winthrop, to whom the president, in his discourse, has justly

assigned the first place in the list of the leaders and benefactors of the colony. The chief magistracy this year was intrusted to the youthful stranger, Sir Henry Vane. Winthrop was the deputy-governor; and, as the representatives did not occupy a separate chamber till 1644, the venerable founder of the colony may be easily supposed, as to the substance, to have addressed both branches of the primitive little legislature somewhat as follows :—

“Men, Brethren, and Fathers: The matter of founding a college is beyond question one of the most important which hath engaged our attention since the hand of God conducted us to these uttermost corners of the earth. Hitherto, what we have done hath mostly had respect either to the bodily safety and comfort, or the social ordering, or the spiritual edification of this present generation of planters, that is to say, of ourselves. But a higher object demandeth our care. These houses which we have builded will decay; these pious teachers that now minister to us, bright and shining lights though they be, will go down to the dust, and we shall be gathered by their side. What, then, shall be the condition of our children, and our children’s children, when pastor and parent are gone, if we fail to provide for their training up in good learning and the knowledge of God’s word?

“Doth it seem to you, men and brethren, a great work to build up a house of learning in the midst of these deep forests? I grant it to be so, especially in the present exhausted condition of this poor colony, and while a war betwixt us and the heathen is raging. But the parent, though he be starving, spareth a part of his last loaf, that his hungry babe may have bread on the morrow; and yonder poor Indian woman, whom I discern through the window as I speak to you, will strip the blanket from herself to cover her freezing child. Let us, of the frugal means which the good God hath yet left us, lay the foundation, and doubt not that benefactors will rise up, when they are least looked for. That Being, whose prophet smote the rock, and made it flow with a living stream, is able to open a spring of beneficence, even in this thirsty wilderness.

“Doth any one deem, that to erect a seat of science is to go about a work beyond the decency of the day of small things in which we live, and savoring of the bravery of an old and abundant state? It were so, if we thought to rival the spacious cloisters and lofty towers of our *alma mater*, in old England; but not, while we seek only to provide for our children those modest means of education which becomen an infant commonwealth. There goeth forth ordinarily, in human affairs, a small beginning, even in the greatest work. There was a time when Oxford and Cambridge, the twins of learning at home, were struggling into existence by the care of our fathers, albeit at that time under the cloud of a corrupted church, in ages long past. If we now lay the corner-stone of a college, however humble, on a right foundation of piety and truth, now, blessed be God, dispensed among us uncorrupt and sincere, think not, men and brethren, I speak the language of extravagance, if I foretell the day, when stately edifices will rise within the inclosure of our modest school; when libraries and cabinets will open their treasures in these precincts, now scarcely safe from the beasts of the forest; when Nature, tortured in our laboratories, shall confess her hidden mysteries; when, from the towers of our academy, the optic tube, lately contrived by the Florentine philosopher, shall search out the yet undiscovered secrets of the deepest heavens; when a long line of those here formed to the service of God and mankind shall stand recorded in our catalogue. Yea, brethren and fathers, of a truth I can foresee the day when, after the lapse of centuries, a venerating posterity, on some festival consecrated to the memory of its founders, shall gather together, and with solemn prayers, and grave discourse, and decent festivities, heap blessings on our names. When that day shall come, though hundreds of years shall first have passed, the clouds shall press more lightly on my bosom, as I shall rest in mine house of clay.

“Besides, men, brethren, and fathers, consider, I pray you, the work we have undertaken. It is to build a pure commonwealth on the rock of truth, on the foundation of the prophets and apostles, Jesus Christ himself being the chief

corner-stone. We have no mines of gold to tempt adventurers, as hath befallen in the Spaniard's colonies, southward of Virginia; neither doth our commerce, though hopefully prospering, yield the abundant returns of the Spice Islands. But there seemeth a well-grounded persuasion, that this our New England hath, in these last days, been reserved to a great work. Even certain of the heathen poets appear to have entertained a foreboding of its discovery; and Seneca speaketh of the latter ages, when Oceanus shall loosen his bonds, and a vast continent be discovered. To that long-hidden region the hand of God hath guided us, to found a Christian republic, and establish a pure church. And think you, brethren, there can be any other foundation laid than that is laid—the knowledge of all useful truth, and the apprehension of the word? Trust me, there can not; and this seat of learning, which you propose to found, is not so much advisable as necessary. It is the appointed means of carrying on the great work we were sent hitherto to accomplish. Your harvests may fail, and the coming year will supply the want. Fires may consume your dwellings, and the forest will yield in abundance the materials to replace them. Even a portion of our young men may fall beneath the tomahawk of the savage, and the loss, although most grievous, (as Pericles justly observeth in the funeral oration over the Athenians, who fell in the first year of the Peloponnesian war, and which, in the second book of Thucydides, his History is ascribed, I know not if truly, to that famous popular chieftain,) may yet be restored. But, if the light of learning shall go out; if the study of God's word among us shall perish; if, as these pious fathers one by one are taken away, none shall rise up in their stead—it will bring a slowly-creeping distemper upon the land, and will strike a wound into New England's heart which can never be healed.

"On the other hand, let us found the college now, in the infancy of the colony; let no space, no, not for a day, be interposed, in which ignorance can gain a foothold; let sound human learning, and the study of the scriptures of truth, go hand in hand with the growth of the state; and I tell you, men and brethren, the feeble plant will take root and flourish. Though sown in weakness, it shall be raised in power. A succession of the learned and pious, the great and the good, shall here be trained up, to make glad the cities and churches of the Lord. Prosperous times may follow, and your sons shall adorn and promote the prosperity of the land. Dark and adverse days may succeed, but the prudent counselor and the eloquent orator shall not fail; and, so long as New England or America hath a name on the earth's surface, the fame and fruit of this day's work shall be blessed. Men, brethren, and fathers, I have done."

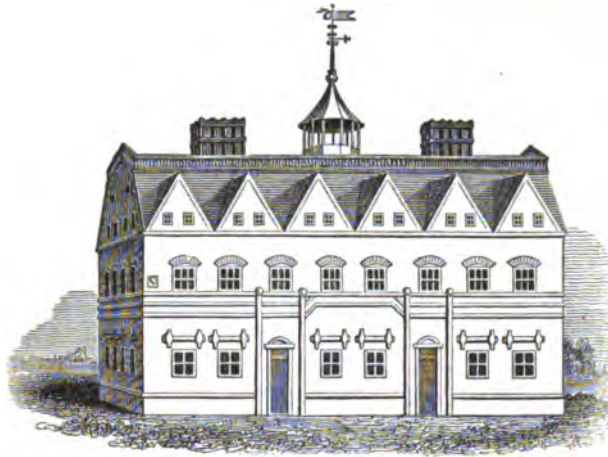
"Such, however presumptuous the attempt to embody them, were the motives and the principles on which the college was founded. It was an institution established by the people's means for the people's benefit. If, in any other quarter of the globe, it has been objected to seats of learning, that they nourish a spirit of dependence on power, such has never been the reproach of our *alma mater*. Owing much, at every period before the revolution, to the munificence of individuals in the mother country, it never was indebted to the crown for a dollar or a book. No court favor was ever bestowed, and no court lesson ever learned. Generation after generation went forth from her lecture-rooms, armed in all the panoply of truth, to wage the battles of principle, alike under the old charter and the new; and, when the fullness of time was come, and the great contest approached, the first note of preparation was sounded from Harvard Hall. Yes, before the stamp act was passed; yes, before committees of correspondence were established throughout the colonies; before Otis had shaken the courts with his forensic thunders; before a breath of defiance had

whispered along the arches of Faneuil Hall—a graduate of Harvard College announced in his thesis, on commencement day, the whole doctrine of the revolution. Yes, in the very dawn of independence, while the lions of the land yet lay slumbering in the long shadows of the throne, an eaglet, bred in the delicate air of freedom, which fanned the academic groves, had, from his “coigne of vantage” on yonder tower, drunk the first rosy sparkle of the sun of liberty into his calm, undazzled eye, and whetted his talons for the conflict. Within the short space of twenty-three years, there were graduated at Harvard College six men who exercised an influence over the country’s destinies, which no time shall outlive. Within that brief period, there went forth from yonder walls, James Otis, John Hancock, Joseph Warren, Josiah Quincy; besides Samuel and John Adams, “*geminos, duo fulmina belli.*”

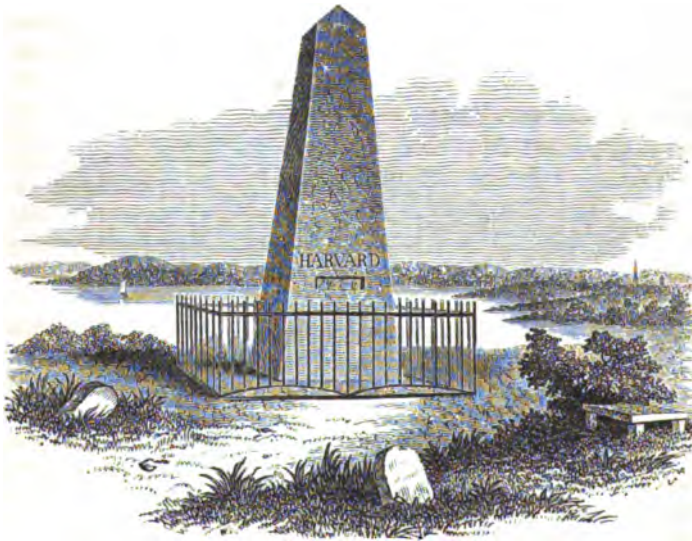
“Yes, fellow-students, if our college had done nothing else than educate Samuel Adams, who, in 1748, on taking his second degree, maintained the thesis that it is lawful to resist the chief magistrate, if the state can not otherwise be preserved; or James Otis, who, by his argument on writs of assistance, in the words of one* well authorized to express an opinion, “first breathed the breath of life into the cause of American freedom;” or John Hancock, the patriot merchant, who offered his fortune as a sacrifice to the country, and placed his name first to the Declaration of her independence; or John Adams, the “colossus who sustained the Declaration” in debate; or Josiah Quincy, (your honored father, Mr. President,) who, in 1774, wrote to his countrymen from London, “that they must seal their testimony with their blood;” or Warren, who, on yonder sacred heights, made haste to obey that awful injunction;—had Harvard College done no more than train up any one of these great men to the country’s service, what title could it need to the world’s gratitude and admiration? But not on one, or all of these, does the fame of our *alma mater* repose. A hundred kindred spirits, in every calling, in every part of the land, in ancient and modern days, alike assert their claim to her spiritual lineage, and form the crown of her glory:—

“Felix prole virum; qualis Berecynthia mater
Invehitur curru Phrygiæ turrita per urbes,
Læta deum partu, centum complexa nepotes,
Omnes cœlicolas, omnes supera alta tenentes.”

* President Adams the elder.



FIRST HARVARD HALL.



MONUMENT TO HARVARD, ON BURIAL HILL, IN CHARLESTOWN.

MONUMENT TO HARVARD.

WITH his name associated every where in the literature of the country with its oldest institution of learning, and represented to the eye by numerous halls and structures standing apart for educational purposes in the midst of trees, themselves monumental, one hundred and ninety years elapsed before the grave, where the mortal body of John Harvard reposed, was marked by a distinctive and appropriate memorial. On the 26th of September, 1828, by contributions, limited in the case of each subscriber to one dollar, from the then living graduates of the college, a shaft of solid granite was erected over his grave on the burial hill, in Charlestown. From the address delivered by Edward Everett on that occasion, we give the following eloquent tribute* to this earliest benefactor of education in America:—

“It is, fellow-students, one hundred and ninety years, this day, since the death of the man who was recognized by his contemporaries as the founder of the most ancient seminary of learning in the country, the college where we received our education. In paying these honors to his single name, we do no injustice to other liberal benefactors of earlier or later times. It is a part of the merit of those who go forward in works of public usefulness and liberality, that they construct a basis on which others of kindred temper, who come after them, may build; and awaken a spirit which may lead to services still more important than their own.

“But, considering the penury of the colony, the exhaustion of its first settlers, and the extreme difficulty which must, in consequence, have attended the foundation of a college, it is not easy to estimate the full importance of the early and liberal benefactions of the man whom we commemorate. But for his generosity, the people might have been depressed for the want of that hope which they built on such an institution, and from the fear of an uneducated posterity; and society might so far have yielded to the various causes of degeneracy incident to a remote and feeble colony, as never afterward to have felt the importance of learning, nor made provision for the education of the people—a result, we may safely say, which would have been fatal to the character of this community.

“But it was otherwise ordered for our welfare. A generous spirit was guided to our shores, for no other purpose, as it would seem, but to dispense the means requisite for the foundation of a college. Less than two hundred years have elapsed, and not much less than six thousand names are borne on the catalogue of the institution, whose venerable walls are, indeed, a noble monument to their founder. There is a tradition that, till the revolutionary war, a gravestone was standing within this inclosure, over the spot where his ashes repose. With other similar memorials, it was destroyed at that period; and nothing but the same tradition remains to guide us to the hallowed spot. Upon it we have erected a plain

* Everett's Orations, Vol. I., pp. 176-181.

and simple, but at the same time, we apprehend, a permanent memorial. It will add nothing to the renown of him who is commemorated by it; but it will guide the grateful student and the respectful stranger to the precincts of that spot, where all that is mortal rests of one of the earliest and most efficient of the country's benefactors.

"It is constructed of our native granite, in a solid shaft of fifteen feet elevation, and in the simplest style of ancient art. On the eastern face of the shaft, and looking toward the land of his birth and education, we have directed his name to be inscribed upon the solid granite; and we propose to attach to it, in a marble tablet, this short inscription, in his mother tongue:—

"On the twenty-sixth day of September, A. D. 1828, this Stone was erected by the Graduates of the University at Cambridge, in honor of its Founder, who died at Charlestown, on the twenty-sixth day of September, A. D. 1638."

"On the opposite face of the shaft, and looking westward, toward the walls of the university which bears his name, we have provided another inscription, which, in consideration of his character as the founder of a seat of learning, is expressed in the Latin tongue:—

"*In piam et perpetuam memoriam JOHANNIS HARVARDII, annis fere ducentis post obitum ejus peractis, academice quæ est Cantabrigiæ Nov-Anglorum alumni, ne diutius vir de litteris nostris optime meritus sine monumento quamvis humiliter jaceret, hunc lapidem ponendum curaverunt.*"

"And now let no man deride our labor, however humble, as insignificant or useless. With what interest should we not gaze upon this simple and unpretending shaft, had it been erected at the decease of him whom it commemorates, and did we now behold it gray with the moss and beaten with the storms of two centuries! In a few years, we, who now perform this duty of filial observance, shall be as those who are resting beneath us; but our children and our children's children, to the latest generation, will prize this simple memorial, first and chiefly for the sake of the honored name which is graven on its face, but with an added feeling of kind remembrance of those who have united to pay this debt of gratitude.

"When we think of the mighty importance, in our community, of the system of public instruction, and regard the venerable man whom we commemorate, as the first to set the example of contributing liberally for the endowment of places of education, (an example faithfully imitated in this region, in almost every succeeding age,) we can not, as patriots, admit that any honor, which is in our power to pay to his memory, is beyond his desert. If we further dwell on our own obligation, and consider that we ourselves have drank of the streams that have flowed from this sacred well,—that in the long connection of cause and effect, which binds the generations of men indissolubly to each other, and it is perhaps owing to his liberality that we have enjoyed the advantages of a public education,—we shall surely feel, as students, that the poor tribute we have united to render to his memory falls infinitely below the measure either of his merit or of our obligation.

"But, humble as they are, let these acts of acknowledgment impress

on our bosoms a just estimate of desert. Of all the first fathers of New England, the wise and provident rulers, the grave magistrates, the valiant captains,—those who counseled the people in peace, and led them in war,—the gratitude of this late posterity has first sought out the spot where this transient stranger was laid to rest, scarce a year after his arrival in America. It is not that we are insensible to the worth of *their* character, nor that we are ungrateful for *their* services. But it was given to the venerated man whom we commemorate this day first to strike the key-note in the character of this people—first to perceive with a prophet's foresight, and to promote with a princely liberality, considering his means, that connection between private munificence and public education, which, well understood and pursued by others, has given to New England no small portion of her name and her praise in the land. What is there to distinguish our community so honorably as its establishments for general education,—beginning with its public schools, supported wholly by the people, and continued through the higher institutions, in whose endowment public and private liberality has gone hand in hand? What so eminently reflects credit upon us, and gives to our places of education a character not possessed by those of many other communities, as the number and liberality of the private benefactions which have been made to them? The excellent practice of *liberal giving* has obtained a currency here which, if I mistake not, it possesses in few other places. Men give, not merely from their abundance, but from their competence; and following the great example, which we now celebrate, of John Havard, who gave half his fortune and all his books, it is no uncommon thing for men to devote a very considerable portion of estates, not passing the bounds of moderation, to the endowment of public institutions.

"And well does the example of Harvard teach us that what is thus given away is in reality the portion best saved and longest kept. In the public trusts to which it is confided, it is safe, as far as any thing human is safe, from the vicissitudes to which all else is subject. Here, neither private extravagance can squander, nor personal necessity exhaust it. Here it will not perish with the poor clay to whose natural wants it would else have been appropriated. Here, unconsumed itself, it will feed the hunger of the mind,—the only thing on earth that never dies,—and endure, and do good for ages, after the donor himself has ceased to live, in aught but his benefactions.

"There is in the human heart a natural craving to be remembered by those who succeed us. It is not the first passion which awakens in the soul, but it is the strongest which animates, and the last which leaves it. It is a sort of instinctive philosophy, which tells us that we who live, and move about the earth, and claim it for our own, are not *the human race*; that those who are to follow us when we are gone, and those that here lie slumbering beneath our feet, are with us but one company, of which we are the smallest part. It tells us, that the true glory of man is not that which blazes out for a moment, and dazzles the contemporary

spectator; but that which lives when the natural life is gone; which is acknowledged by a benefited and grateful posterity, whom it brings back, even as it does us this moment, with thankful offerings at an humble tomb; and gives to an otherwise obscure name a bright place in the long catalogue of ages.

"We stand here amidst the graves of some of the earliest and best of the fathers and sons of New England. Men of usefulness and honor in their generation lie gathered around us; and among them, no doubt, not a few, whose standing in the community, whose public services, and whose fortune placed them, in the estimate of their day, far above the humble minister of the gospel, who landed on our shores but to leave them forever. But were it given to man to live over the life that is passed, and could the voice of a superior being call on the sleepers beneath us to signify whether they would not exchange the wealth and the honors they enjoyed for the deathless name of this humble stranger, how many would gladly start up to claim the privilege!

"We have now, fellow-students, discharged our duty to the memory of a great benefactor of our country. In this age of commemoration, as it has been called, it was not meet that the earliest of those to whom we all are under obligations should be passed over. Nor is it we who are here assembled, nor the immediate inhabitants of this vicinity, who are alone united in this grateful act. What is done for intellectual improvement is as little bounded by space as by time. Not a few of the sons of Harvard, in the distant parts of the Union, have promptly contributed their mite toward the erection of this humble structure. While the college which he founded shall continue to the latest posterity, a monument not unworthy of the most honored name, we trust that this plain memorial will also endure. While it guides the dutiful votary to the spot where his ashes are deposited, it will teach to those who survey it the supremacy of mental and moral desert, and encourage them too, by a like munificence, to aspire to a name as bright as that which stands engraven on its shaft:—

'——— clarum et venerabile nomen
Gentibus, et multum nostræ quod proderat urbi.'

XIV. UNIVERSITIES IN THE SIXTEENTH CENTURY.

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

THE reader has doubtless been surprised to learn how much was left untaught, in the sixteenth century, in the schools. Geography and history were entirely omitted in every scheme of instruction, mathematics played but a subordinate part, while not a thought was bestowed either upon natural philosophy or natural history. Every moment and every effort were given to the classical languages, chiefly to the Latin.

But we should be overhasty, should we conclude, without further inquiry, that these branches, thus neglected in the schools, were therefore every where untaught. Perhaps they were reserved for the university alone, and there, too, for the professors of the philosophical faculty, as is the case even at the present day with natural philosophy and natural history; nay, logic, which was a regular school study in the sixteenth century, is, in our day, widely cultivated at the university.

We must, therefore, in order to form a just judgment upon the range of subjects taught in the sixteenth century, as well as upon the methods of instruction, first cast a glance at the state of the universities of that period, especially in the philosophical faculties.

A prominent source of information on this point is to be found in the statutes of the University of Wittenberg, revised by Melancthon, in the year 1545.

The theological faculty appears, by these statutes, to have consisted of four professors, who read lectures on the Old and New Testaments,—chiefly on the Psalms, Genesis, Isaiah, the Gospel of John, and the Epistle to the Romans. They also taught dogmatics, commenting upon the Nicene creed and Augustine's book, "*De spiritu et litera*."

The Wittenberg lecture schedule* for the year 1561, is to the same effect; only we have here, besides exegesis and dogmatics, catechetics likewise.

According to the statutes, the philosophical faculty was composed

* This is to be found in Strobel's "New Contribution to Literature," who likewise cites an earlier one of the year 1507.

of ten professors. The first was to read upon logic and rhetoric; the second, upon physics, and the second book of Pliny's natural history; the third, upon arithmetic and the "*Sphere*" of John de Sacro Busto; the fourth, upon Euclid, the "*Theoria Planetarum*" of Burbach, and Ptolemy's "*Almagest*;" the fifth and sixth, upon the Latin poets and Cicero; the seventh, who was the "*Pedagogus*," explained to the younger class, Latin Grammar, Linacer *de emendata structura Latini sermonis*, Terence, and some of Plautus; the eighth, who was the "Physicus," explained Aristotle's "*Physics and Dioscorides*;" the ninth gave instruction in Hebrew; and the tenth reviewed the Greek Grammar, read lectures on Greek Classics* at intervals, also on one of St. Paul's Epistles, and, at the same time, on ethics.

The above requisitions of the statutes are likewise confirmed by the lecture schedule already alluded to. To the lectures were added declamations and disputes, and that alternating, so that on one Saturday there would be declamations, on the next disputes, &c.

In regard to lectures by jurists and medics, the statutes are silent. But we learn from the lecture schedule, before cited, that seven jurists read upon the various departments of Roman and canon law; of medics, one discoursed upon the ninth book of "*Rasis ad Almansorem*;" a second read "*Hippocratica et Galenica*;" a third, likewise upon Galen, and also upon Avicenna.

Thus the philosophical faculty appears to have been the most fully represented at Wittenberg, as it included ten professors, while the theological had but four, the medical but three. The Elector John Frederick, in a new foundation-grant to the university, specified a faculty of "*Artists*," the "origin and parent of all the other faculties," and took it under his especial protection. Its functions overstepped even the limits of the curriculum, prescribed by the statutes. Thus Melancthon read a historical course upon Carion's "*Chronicon*," as did afterward his son-in-law, Peucer. A new chair, moreover, was established in 1572, when William Rabot, a native of Dauphiny, was installed in Wittenberg as professor of the French language. In his inaugural address, he spoke of the affinity between the Germans and the French, remarked that, according to the "*lex Carolina*," the German emperors were expected to understand French, and praised the elector, because he had called a special teacher to give instruction in the language.

On a comparison of different Protestant universities of the sixteenth

* When Melancthon was a student at Wittenberg, there existed no chair there for instruction in the Greek language; at Heidelberg, however, Dionysius Reuchlin had, prior to this period, been inducted into the office of Greek Professor.

century, it appears that they all proposed to themselves essentially one and the same problem. This problem was, in part, entirely new; though, in part also, an inheritance of the past, made new, however, or greatly modified, under the demands of that awakening age. We need only refer, in illustration of our statement, to the fact, that before Erasmus there was no exegesis of the New Testament in the original, before Reuchlin none of the Old, and that Rudolf Agricola was the first to initiate a new style of commenting on and interpreting the ancient classics.

But, as in our own day, we should not be in a condition to make a correct estimate of the value of our present schools and universities simply by consulting school-plans, governmental decrees, lecture schedules, and the like, but must much rather, to avoid erroneous conclusions, inform ourselves, by careful observation, upon the internal economy of these institutions, so neither can we decide upon the merits of the institutions of learning of former centuries, without putting them to a similar ordeal. Now there happens to have been preserved some indirect testimony to this point, going to show that studies in the sixteenth century, at least those of the majority of students, by no means conformed to the idea which the reader will naturally form of them in the light of the preceding pages. A few examples will suffice in support of this assertion.

The professor of mathematics and astronomy, at Wittenberg, Erasmus Reinhold,* was an eminent scholar, who advocated the Copernican system; but, in spite of his ability, "because of the general distaste for mathematical pursuits, he had few hearers." Melancthon wrote to Duke Albert, of Prussia, as follows: "Very few apply themselves to mathematics, and fewer still are the men of wealth and influence who foster this study by their patronage. Our court pays scarce any heed to it." To Spalatin he wrote: "There is urgent need of two instructors of mathematics in Wittenberg, that a science so absolutely indispensable, but now neglected, may come into honor." But the best proof we can give of the disrepute into which mathematics had then fallen, is to be found in the address of invitation of a Wittenberg mathematical *Docent*. He eulogizes arithmetic, and implores students not to be intimidated by the difficulties that this study presents. The first elements are easy, and though the principles of multiplication and division require more diligence, yet the attentive can master them with ease. It is true there are parts of arithmetic which are much harder, "but," he continues, "I now speak only of these rudiments, which I am to teach, and which you will

* Reinhold was born at Saalfeld, in 1511, and he died in 1552. His principal work was entitled "*Tabulae prutenicae coelestium motuum*."

find serviceable." We can scarcely trust our eyes, when we read such language as the above.

In the year 1536, Melancthon read a course of lectures upon Ptolemy's Treatise, "*De apotelesmatibus et judiciis astrorum*." On finishing the first book, he announced the second in these terms: "It gives me pain to perceive that some of my hearers have already taken a dislike to so excellent an author." Then, after a panegyric upon Ptolemy's book, he continues: "It appears marvelous to me that so many can reject such a book. For, if we think of it, the life of a student is a continual warfare. Now it is not becoming in a soldier to grow weary and faint-hearted when every thing does not go according to his wish. I therefore exhort all who began with me these lectures upon Ptolemy to come back. To those who have not deserted me, I offer my tribute of thanks."

We might conclude that such a general indisposition to study had reference mainly to the department of natural science, and not to philology; inasmuch as the latter was the peculiar educational agent of that era. But it fared no better with Greek at Wittenberg, as we may learn from the following expressions of Melancthon. In 1531, he announced that he would give some lectures upon Homer: "I shall," said he, "according to my custom, read *gratis*. But, as Homer in his life-time was needy and a beggar, so the same fate follows him now that he is dead. For this noblest of poets is compelled now to wander about imploring men to listen to him. He does not, however, seek out those groveling souls, bent only on gain, who, not content with resting in ignorance themselves, delight in crying down all noble learning, but turns rather to those free spirits who aim after perfect knowledge."

There is preserved an announcement from Melancthon, of the year 1533, of his lectures on the 4th Philippic of Demosthenes.* In this he says: "I had hoped, by disclosing to my hearers the grace of the second Olynthiac, to have allured them to a nearer acquaintance with Demosthenes. But I perceive that this generation has no ear for such authors. For there remain to me but few hearers, and these have not forsaken me lest I should be wholly discouraged; for this courtesy, I thank them. But I shall, nevertheless, continue to discharge the duties of my office. I shall commence these lectures to-morrow." But, on another occasion, Melancthon spoke in still stronger terms: "To-morrow it is my intention to begin my exposition of the "*Antigone*" of Sophocles. And I would here utter an admonition, if I thought it would be at all heeded, in rebuke of the shock-

* The scarcity of printed copies of Demosthenes occasioned the request "that the students should transcribe Melancthon's copy."

ing barbarism of manners that prevails around us.* But I must except a few of a better class, who have been my hearers thus far, and thank them."

As at the schools, so also at the universities, Latin was the chief object of attention. And, while Greek was regarded with indifference, we have the authority of Grohmann for the assertion that a special Professorship of Terence was founded by Frederick the Wise. But we have a truer criterion by which to judge of the limited nature of the studies of that period, as compared with the wide field which they cover at the present day, in the then almost total lack of academical apparatus and equipments. The only exception was to be found in the case of libraries; but, how meager and insufficient all collections of books must have been at that time, when books were few in number and very costly, will appear from the fund, for example, which was assigned to the Wittenberg library; it yielded annually but one hundred gulden, (about \$63,) with which, "for the profit of the university and chiefly of the poorer students therein, the library may be adorned and enriched with books in all the faculties and in every art, as well in the Hebrew and Greek tongues."†

Of other apparatus, such as collections in natural history, anatomical museums, botanical gardens, and the like, we find no mention; and the less, inasmuch as there was no need of them in elucidation of

* This strong expression of Melancthon's agrees throughout with many of his addresses, delivered to the students on the annual reading of the university statutes. Take an extract, by way of example, from the address of the year 1533: "*Quorundam tanta est ferocitas, ut contemptum disciplinas et legum, fortitudinem quandam esse putent. Jure deplorant omnes boni viri hoc tempore nimis laxatam esse disciplinam.*" "The barbarity of some is so great that they even think that a contempt for discipline and law is a part of true bravery." And again he says, in the address of 1537: "*Nunquam juvenus tam impatiens legum et disciplinae fuit, prorsus suo arbitrio, non alieno vult vivere. Non enim hominum sed Cycloporum hi mores sunt, totas noctes in publico tumultuari, furiosis clamoribus omnia complere, convicia, lapidum jactu, armis in pacatos adeoque inermes atque innocentes hostiles in modum debacchari oppugnare honestorum civium aedes, effringere fores, fenestras, turbare somnum puerperis miserisque aegrotis ac senibus, dissipare tabernacula in foro, currus et quicquid occurrit.*" "Never were our youth so impatient of laws and of discipline, so determined to live after their own wills and not according to the wills of others. But it is the part, not of men, but of Cyclops, to make public tumults all night; to fill whole neighborhoods with furious outcries; to make bacchanalian and even hostile assaults upon the unarmed and innocent with insults, throwing stones, and even with weapons; to lay siege to the dwellings of respectable citizens; to break in their doors and windows, destroy the slumbers of women in child-bed, of the wretched, the sick, and the aged; to demolish the booths in the market-place, carriages, and whatever else comes in the way."

† The largest salaries then received by any of the professors at Wittenberg amounted to only two hundred gulden. The third medical professor had but eighty gulden. And the annual expenditure of the entire university did not exceed three thousand seven hundred and ninety-five gulden. And yet we find sumptuary edicts then in force, which forbade the rector, a doctor, &c., to entertain more than one hundred and twenty guests at any one time. But we should remember that a cord of wood could then be bought for six *groechen*, a hare for two, and other things in proportion. "For board, lodging, and government, the student paid annually, to one of the professors, the sum of thirty gulden."

such lectures as the professors ordinarily gave. When Paul Eber, the theologian, read lectures upon anatomy, he made no use of dissection. And it was stated, as a remarkable event, that the medical lecturer, Schurf, in the year 1526, instituted an anatomical analysis of a human head. For it was not until some years after, that the special enactment, requiring two dissections annually, was passed. In Frankford-on-the-Oder, Eggeling instituted the first dissection in 1542. But much earlier, in 1482, Pope Sixtus IV. had issued a brief, in which the University of Tübingen received permission to dissect one subject every third or fourth year. It was not, however, until the middle of the sixteenth century, that the first anatomical museum was founded by the efforts of the talented Leonard Fox; and, in 1569, the medical faculty were empowered to dissect the bodies of executed criminals.*

The earliest mention that we find of a botanical garden at Tübingen is in 1652, at Wittenberg in 1668. Yet, at the latter place, it appears to have been a part of the duty of Professor Niemann, in 1624, "to take medical students, twice in each year, on a botanizing tour, (*herbatum*).†

The earliest regulations for the Tübingen cabinet of natural history are of the year 1771.

In the year 1603, Professor Joestelius, at Wittenberg, asked in vain for the erection of an observatory, and it was not until 1752 that Tübingen could boast of one.

In the following pages we shall see how there grew up by degrees a strong desire, no longer to teach and to learn a traditional science of nature from books alone, but to question nature herself directly, without an interpreter; meanwhile, what has been now advanced respecting academical institutes (*apparatus*), may serve to point in advance to the period when a true realism was applied to the investigation of nature, and an enlightened humanism, moving in language as in its native element, penetrated through the form to the spirit of the ancient classics.

* The following inscription was placed over the door of the Wittenberg anatomical theater, where executed criminals were dissected :—

"Qui vivi nocuere mali, post funera prosunt,
Et petit ex ipsa commoda morte salus."

"Here wicked men are found at last in useful ways,
And here death shows us how to lengthen out our days."

† As early as 1615, the University of Wittenberg sentenced a student, who had been convicted of the crime of dueling, to pay a fine of three hundred gulden, hoping with the money to found a botanical garden, but the project failed through the inability of the student to pay.

XV. YALE COLLEGE.

It was a favorite plan of the Rev. John Davenport, "pastor of the Church of Christ, at New Haven," from the first settlement of the colony, at Quinnipiac, in 1638, that "a small college, such as the day of small things will permit, should be settled at New Haven, for the education of youth in good literature, to fit them for public services, in church and commonwealth." In 1644, the general court of the colony voted to make an annual contribution to aid the collegiate school, at Cambridge, Mass. In 1652, Gov. Eaton informed the town meeting of New Haven "that there is some motion *again* on foot, concerning the setting up of a college here," and, in the same year, the general court of the colony voted, "if Connecticut do join, the planters are generally willing to bear their just proportion for erecting and maintaining a college at New Haven." In 1656, Governor Hopkins writes from London, to Rev. Mr. Davenport, "if I understand that a college is begun, and likely to be carried on in New Haven, for the good of posterity, I shall give some encouragement thereunto." But the numerous embarrassments attending an infant settlement, prevented the plan of Mr. Davenport from being immediately executed, although it was kept constantly in view by the leading clergymen of the colony.*

In the year 1698, a plan was devised for erecting a college in Connecticut, by a general synod of the churches. It was intended that the synod should nominate the first president and inspectors, and have some kind of influence in all future elections, "so far as should be necessary to preserve orthodoxy in the governors;" that the college should be called the "School of the Church," and that the churches should contribute toward its support. This project failed; but, in the following year, ten of the principal ministers of the colony, were nominated and agreed upon by general consent, both of the clergy and laity, to be trustees, to found, erect, and govern a college. The individuals thus named for this important object, were the Rev. James Noyes, of Stonington; the Rev. Israel

* *A Sketch of the History of Yale College in Connecticut*, prepared by Professor Kingale, and first published in the *American Quarterly Register*, for August, 1835, and September, 1836.

Chauncey, of Stratford; the Rev. Thomas Buckingham, of Saybrook; the Rev. Abraham Pierson, of Killingworth; the Rev. Samuel Mather, of Windsor; the Rev. Samuel Andrew, of Milford; the Rev. Timothy Woodbridge, of Hartford; the Rev. James Pierpont, of New Haven; the Rev. Noadiah Russell, of Middletown, and the Rev. Joseph Webb, of Fairfield. These clergymen, with the exception of the Rev. Mr. Buckingham, of Saybrook, were all graduates of Harvard College.

The trustees met in New Haven some time in the year 1700, and formed themselves into a society, to consist of eleven ministers, including a rector, and agreed to found a college in the colony of Connecticut. At a subsequent meeting, the same year, at Branford, each of the trustees brought a number of books and presented them to the association, using words to this effect, as he laid them on the table: *I give these books for founding a college in Connecticut.* About forty folio volumes were contributed on this occasion. The trustees as a body took possession of the library thus formed, and committed it to the care of the Rev. Mr. Russell, the minister of Branford. This act of depositing the books has ever been considered the beginning of the college. It was in the year 1700, that this transaction took place, though the precise date of the meeting at Branford has not been ascertained. In all the measures which were taken for founding the college, the Rev. Mr. Pierpont of New Haven, the Rev. Mr. Andrew of Milford, and the Rev. Mr. Russell of Branford, were the most active. As doubts were entertained whether the trustees could legally hold lands, and whether the new institution could be supported wholly by private contributions, it was determined to apply to the General Assembly of the colony for assistance, and to ask for a charter of incorporation.

At the session of the colonial legislature in New Haven, in October, 1701, a petition, signed by a large number of ministers and others, was presented to that body, in which they stated, "that from a sincere regard to, and zeal for, upholding the protestant religion, by a succession of learned and orthodox men, they had proposed that a collegiate school should be erected in this colony, wherein youth should be instructed in all parts of learning, to qualify them for public employments in church and civil State; and that they had nominated ten ministers to be trustees, partners, or undertakers, for founding, endowing, and ordering the said school, and thereupon desired, that full liberty and privilege might be granted to the said undertakers for that end." After the meeting of the Assembly and before the charter was granted, the Hon. James Fitch, of Nor-

wich, one of the Council, made a formal donation to the new seminary of a tract of land in Killingly, of about six hundred acres, and the glass and nails which should be necessary to erect a college and hall. This donation was made, in consequence of "the great pains and charge which the ministers had been at, in setting up a collegiate school." On the 9th day of October, 1701, the Colonial Assembly granted a charter to the college, with some small variations only, from the form which had been drafted by the trustees.

An Act incorporating Yale College.

Whereas several well disposed and public spirited persons of their sincere regard to, and zeal for the upholding and propagating of the Christian Protestant religion, by a succession of learned and orthodox men, have expressed by petition their earnest desires that full liberty and privilege be granted unto certain undertakers for the founding and suitably endowing and ordering a collegiate school within his Majesty's Colony of Connecticut, wherein youth may be instructed in the arts and sciences, who through the blessing of Almighty God, may be fitted for public employment, both in church and civil State.

To the intent therefore that all due encouragement be given to such pious resolution, and that so necessary and religious an undertaking may be set forward, supported and well managed, *Be it enacted by the Governor and Company of the said Colony of Connecticut in General Court assembled*, and it is enacted and ordained by the authority of the same, that there be, and hereby is full liberty, right and privilege granted unto Mr. James Noyes of Stonington, Mr. Israel Chauncey of Stratford, Mr. Thomas Buckingham of Saybrook, Mr. Abraham Pierson of Killingworth, Mr. Samuel Mather of Windsor, Mr. Timothy Woodbridge of Hartford, Mr. James Pierpont of New Haven, Mr. Samuel Andrew of Milford, Mr. Joseph Webb of Fairfield, Mr. Noadiah Russell of Middletown, being all Reverend Ministers of the Gospel, and inhabitants within this said Colony, proposed to stand as trustees, partners, or undertakers for the said school, to them and their successors, to erect, form, direct, order, establish, improve, and at all times in all suitable ways for the future to encourage the said school in such convenient place or places, and in such form, manner, and under such orders and rules, as to them shall seem most conducive to the aforesaid end thereof—so as such rules or orders be not repugnant to the laws of the civil government, as also to employ the moneys or any other estate which shall be granted by this court, or otherwise contributed to that use according to their direction, for the benefit of the said collegiate school from time to time, and at all times henceforward. And be it further enacted by the authority aforesaid, that the before named trustees, partners, or undertakers, together with such others as they shall associate to themselves, (not exceeding the number of eleven, or at any time being less than seven :) Provided also, that the persons nominated and associated from time to time to fill up the said number be Ministers of the Gospel inhabiting within this Colony, and above the age of forty years, or the major part of them—the said James Noyes, Israel Chauncey, Thomas Buckingham, Abraham Pierson, Samuel Mather, Timothy Woodbridge, James Pierpont, Samuel Andrew, Joseph Webb, and Mr. Noadiah Russell, undertakers, and of such persons, so chosen and associated as above said, at any time hereafter have, and shall have henceforth, the oversight, full and complete right, liberty, power, and privilege, to furnish, direct, manage, order, improve, and encourage from time to time, and in all times henceforth, said collegiate school so erected and formed by them in such ways, orders, and manner, and by such persons, rector, master, and officers appointed by them, as shall, according to their best discretion, be most conducive to the forementioned end thereof. And moreover it is enacted by the authority aforesaid, that the said James Noyes, Israel Chauncey, Thomas Buckingham, Abraham Pierson, Samuel Mather, Timothy Woodbridge, James Pierpont, Samuel Andrew, Joseph Webb, and Noadiah Russell, undertakers, trustees, or partners, and the said persons taken from time to time into partnership or associated as aforesaid with

themselves, shall have and receive (and it is hereby given and granted unto them) the full and first sum of one hundred and twenty pounds in country pay, to be paid annually, and at all times hereafter, (until this court order otherwise,) to them and to such person or persons only as they shall appoint and empower to receive the same, to be faithfully disposed of by the said successors, partners or undertakers for the end aforesaid according to their discretion, which said sum shall be raised and paid in such ways and manners, and such a value as the country rate of this Colony are and have been usually raised and paid.

It is also further enacted by the authority aforesaid, that the said undertakers and partners, and their successors, be, and hereby are further empowered to have, accept, acquire, purchase, or otherwise lawfully enter upon any lands, tenements, and hereditaments to the use of the said school, not exceeding, the value of five hundred pounds per annum. And any goods, chattels, sum or sums of money whatever, as have heretofore already been granted, bestowed, bequeathed or given, or as from time to time shall be freely given, bequeathed, devised, or settled by any person or persons whatsoever, upon, and to and for the use of the said school, toward the founding, erecting, or endowing the same, and to sue for, recover, and receive, all such gifts, legacies, bequests, annuities, rents, issues, and profits arising therefrom, and to employ the same accordingly; and out of the estate, revenues, rents, profits, and incomes accruing and belonging to said school, to support and pay as the said undertakers shall agree, and the said rector, or master tutors, ushers, or other officers, their respective annual salaries and allowances; as also for the encouragement of the students to grant degrees or licenses, as they, or those deputed by them shall so raise to order and appoint.

The new institution thus founded, appears, both in the language of the charter and in the privileges granted to it, what it in fact was, an inconsiderable establishment. It is not denominated a *college*, but a "collegiate school;" it is fixed in no place, but the trustees are authorized to "encourage the said school in such convenient place or places, as to them shall seem meet;" and they are likewise empowered "for the encouragement of the students, to grant degrees or licenses, as they, or those deputed by them, shall see cause to order and appoint."

* The trustees, on receiving their charter, met at Saybrook, Nov. 11, 1701, and chose for rector, the Rev. Israel Chauncey, of Stratford. Mr. Chauncey was son of the Rev. Charles Chauncey, the second president of Harvard College, and had a high reputation for scholarship. He, however, declined the place, and the Rev. Abraham Pierson, of Killingworth, was chosen the first rector of the school. At this same meeting, the trustees determined to establish the seminary at Saybrook, "unless, upon further consideration, they should alter their minds." They also desired the rector to remove to Saybrook; but till that could be effected, they directed, that the scholars should be instructed in Killingworth. There was nothing in the charter of the school respecting a religious test of the trustees, rector, or tutors, or prescribing any course of religious instruction. Every thing of this kind was left with the trustees to regulate from time to time, as circumstances, in their view, should require. At the first meeting at Saybrook, among other rules for the

government of the college, the trustees directed, that the students should not be instructed in any other "system or synopsis of divinity, than such as the said trustees do order and appoint," and, "that the said students be weekly caused memoriter to recite the Assembly's Catechism in Latin, and Ames's Theological Theses," of which, as also of Ames's Cases of Conscience, the rector was to make, or cause to be made, "such explanations, as may, through the blessing of God, be most conducive to their establishment in the principles of the Christian Protestant religion."

No plan of studies for the infant college, appears to have been formed by the trustees. The probability is, that the course of instruction then pursued at Harvard College was adopted as nearly as circumstances would allow; and this part of their arrangements may have been included in the general order, that where no special provision was made by the trustees, "the laws of Harvard College should be the rule." The first student in the collegiate school, was Jacob Hemingway, who was graduated at Saybrook in 1704; and who was afterwards, for many years, the minister at East Haven. He entered the seminary as a regular member in March 1702, and continued alone under the instruction of Mr. Pierson, till September of the same year. At this time, the number of students being increased to eight, they were put in different classes, according to their previous acquirements. One of these, John Hart, afterwards minister at East Guilford, who graduated alone in 1703, had been three years at Cambridge. The first commencement was held at Saybrook in September 1702, when four young gentlemen, who had before been graduated at Harvard, and one other who had been privately educated, received the degree of Master of Arts, and one received the degree of Bachelor. As the prospects of the college were now brighter, and the number of the students had increased, Mr. Thomas Hooker, of Farmington, a graduate of Harvard College, and grandson of the Rev. Thomas Hooker, the first minister of Hartford, was elected tutor. The school thus became regularly organized.

Small, however, as the seminary was at this time, the efforts necessary to raise it even to so humble a height, must have been far greater than might be concluded on a mere general view. There were in Connecticut, in the year 1700, but twenty-eight towns. In the opinion of President Stiles, the number of the inhabitants of these towns, was from twenty to thirty thousand; but this is probably too high an estimate. Dr. Trumbull, some years after the death of President Stiles, with better means of judging, supposed fourteen

or fifteen thousand the highest probable number. But whatever, at that time, was the population of Connecticut, it was scattered and poor, exhausted by Indian wars, with little commerce, and depending for subsistence almost wholly on the cultivation of the soil. The honor of establishing a college in Connecticut, under circumstances so discouraging, belongs almost exclusively to the clergy. With them the plan originated—they were the first donors; and to them the college was indebted for the most efficient aid and support. Not that the community generally were hostile to the new institution, or withheld their benefactions. The colonial legislature, in the original charter, granted the school, until they should “order otherwise,” an annuity of one hundred and twenty pounds “in country pay,” which was equivalent to sixty pounds sterling. This annuity was continued till the year 1755, with some increase after the year 1745, when the second charter was granted.* This grant, estimated according to the ability of the colony and the necessities of the college, is probably the largest ever made by Connecticut to the same institution. The contributions of individuals, estimated by the same rule, were liberal and abundant.

There was one mistake, as experience proved, in the first proceedings of the trustees; and that was the establishment of the college at Saybrook.† That they hesitated before deciding to do this, and perhaps were divided in their own minds, appears from some of their earliest resolutions which I have already cited. Nor is it a matter of much question why they determined in favor of Saybrook. Of the ten trustees, seven belonged to towns upon the seaside; Stonington and Fairfield being the extreme points represented. Saybrook lay not far from the middle point of the coast; and had the advantage of being the spot where the line of towns on the river, which principally skirted the western bank, met the line of maritime settlements. Much of the higher country, and especially almost all the present county of Litchfield,—which afterwards sent to the college so many scholars of vigorous minds,—was as yet unreclaimed wilderness. Thus Saybrook was a convenient point, where two streams of population met. But after the establishment of the college there, the inconveniences, arising from the sparseness of the settlement, together with other embarrassments naturally

* The various changes introduced into the Charter of Yale College can be traced from the act of 1701, to the provision in the Constitution of 1818, in the original documents published in the “Private Acts and Resolutions of Connecticut,” page 472, *et. seq.*

† The following account of the removal of the College from Saybrook to New Haven is given principally in the language of President Woolsey, in his “*Historical Discourse, pronounced Aug. 14, 1860, one hundred and fifty years after the founding of the Institution.*”

pressing upon a new institution in a small and poor colony, had nearly crushed the college in its infancy. The first rector, Mr. Pierson, who lived in the next town to Saybrook, never removed to that place, because the funds did not allow the erection of a building for his accommodation, and for this reason the students were kept at Killingworth until his death, in 1707. After this, another of the trustees, living so far off as Milford, discharged the duties of a rector, as well as as he could without removing his residence. The senior class was with him at Milford, while the other classes resided at Saybrook under the instruction of the tutors. The students lived scattered about in the town, some of them a mile from the place of instruction. Complaints were uttered against these instructors on the score of youth and inexperience; and sundry of them, says President Clap, "who lived near Hartford and Wethersfield, said that it was a hardship for them to be obliged to reside at Saybrook, when they could as well or better be instructed nearer home." These complaints, as appears from what subsequently occurred, were either suggested to the students with a design to help forward a removal of the college, or else made a removal, which for other reasons was projected, seem still more desirable. In this state of affairs, the trustees met at Saybrook in April, 1716, and although they found the causes of complaint against the tutors not such as to call for any new arrangements, yet they allowed the students to place themselves under other instructors until the next Commencement. The small band of undergraduates,—who would altogether not amount to much more than a quarter of one of the present classes,—were thus scattered: the larger part were collected again at Wethersfield under the tuition of Elisha Williams, afterwards rector; while the few who remained at Saybrook were driven thence by the small-pox in the course of the summer to East Guilford.

The trustees left Saybrook after the meeting in April just mentioned, with no other thought, so far as we can learn, than that they were to make the best they could of the college in its actual location. It was, therefore, a matter of profound surprise to the greater part of the body, when, not long afterward they learned that two of their number had laid a petition before the legislature at its spring session in Hartford, having reference to the affairs of the college. This petition, after representing the languishing state of the institution, arising mainly from want of funds, goes on to say that the people of Hartford had, in conjunction with other well minded persons, subscribed such a sum of money as might put the school

into a flourishing condition. They then offer the request,—which is to be considered as the condition of the subscriptions,—that the college may be fixed at Hartford, and suggest some reasons why it should be. The reasons are that Hartford was more in the center of the colony, and was surrounded with many considerable towns, upon which account it might be supposed that the number of students would be greater than if it were at any other place, which had not the like situation. They add also that several persons in the neighboring province had assured them, not only that they would contribute toward the settling of the school there, but also that they would send their youth thither for education. There had already been subscribed, they say, a sum of between six and seven hundred pounds for this purpose, which, they had good reasons to suppose that other donations would swell to the sum of a thousand pounds or upwards.

It is pretty evident from the tenor of this petition, that the trustees in their meeting at Saybrook in the month of April, although they had adjourned without taking any measures to remove the college, had talked over the possibility of such an act, and that the petitioning trustees who were the two ministers of Hartford, were well aware that the majority of the board would not transplant the college from the seaside. Had they contemplated in their petition the step of effecting the removal by act of the legislature, it would have been highly irregular, and have involved a violation of the charter, which, as we have already seen, allowed the trustees to establish the college in such convenient place or places as to them should seem meet. It is, however, pretty certain that they contemplated no such unlawful interference of the legislature, but only sought for such an expression of opinion and perhaps such pecuniary inducements, as would have more weight with the trustees than any apprehension could have, that their chartered rights would be invaded.

The petitioners to the legislature in speaking of the Hartford subscription, mention that in several other places it had been proposed to do the same thing. What places are intended it does not certainly appear, unless that Wethersfield was one of them. New Haven and Saybrook would be likely to be of the number, but unless Mr. Johnson, in his account of this affair is misinformed, the subscriptions there did not begin to circulate until some time in the summer after the Hartford movement. Meanwhile the legislature had called the trustees before them to show them "their difficulties and what might be by them thought expedient to be done therein, in

order to the proceedings of the assembly for the better advancement of collegiate school." Some of the trustees obeyed the call, and persuaded the legislature not to take the petition into consideration, until the autumnal meeting at New Haven. They also agreed among themselves that, unless they could unanimously decide at the next Commencement where the college should be established, they would desire the assembly to nominate a place for it. At Commencement in September, one of the two tutors resigned,—the other having left his office in the summer,—and the institution was reduced to its lowest point of depression: it had no regular instructor, a rector pro-tempore, and about twenty-five scholars dispersed through the colony. At this time also an attempt was made to unite the minds of the trustees upon Saybrook without success. But now a new difficulty arose. Several of the trustees who had not appeared before the legislature in May, refused to accede to the agreement of the rest, that the affair should be referred to the legislature if they could not agree among themselves, and declared this act was illegal; as it undoubtedly was, no legal warning of a meeting having been issued. The whole Board, with the exception of the two Hartford ministers, came at a meeting held during the session of the legislature in October at New Haven to this same conclusion, that their meeting at Hartford was illegal and not binding, and that it was inexpedient to address the general court. They were moreover advised by the upper house or council by no means to address the lower house; by which we are to understand that it was apprehended, that the majority of the lower house might favor the Hartford petitioners. Having thus set aside the agreement made at Hartford to put the affairs of the college into the hands of the legislature,—an agreement not certainly binding in law, but binding in honor and conscience upon those who were parties to it,—they decided to use the powers which the charter had given them, resolving first to remove the school from Saybrook, to which all agreed except the trustee from Lyme, on the other side of the river; and then to transplant it to New Haven, in which vote five out of eight who were present concurred, while of the three who dissented, one, the trustee from Lyme, was of opinion that, if removed from that place, it could go nowhere more fitly than to New Haven. Of the two absent trustees one was bed-ridden, another was known to be in favor of New Haven. It is quite probable that the majority of the trustees, in this decisive and important measure, acted in concert with the principal magistrates of the colony and the members of the coun-

cil, and went forward through their subsequent embarrassments assured of support in that quarter.

Having thus determined where the college should be placed, the trustees at this time, or not long after, resolved to commence a college building, and applied to Governor Saltonstall for a plan of it. They also appointed two new tutors, of whom only one repaired to New Haven. The senior class was there instructed by Mr. Noyes, the minister of the town, but nearly half of the students persisted in remaining at Wethersfield, and two staid at Saybrook. The important measure of removing the college to New Haven was re-enacted by a vote of six trustees in April, 1717. In May of the same year, the two dissatisfied trustees presented a memorial to the legislature, complaining that the majority of the Board had violated their word in refusing to ask the assembly to nominate a place for the college, and alledging also that the vote of removal to New Haven was not in accordance with the charter, because one of the five trustees who were in it was not legally qualified; and that thus, as the whole number was ten, there was no majority. Probably, at the same session, a remonstrance against the selection of New Haven to be the seat of the college was laid before the General Assembly, from sundry inhabitants of Hartford and New London counties, urging that the interests of those, the larger counties, had not been consulted in this act of the trustees of the college. In consequence of these memorials a resolution was passed in the lower house, but rejected in the upper, requiring the trustees to give their attendance at the assembly as speedily as might be, and to lay before that body the circumstances of the collegiate school.

From this time until October, 1717, when the Assembly met at New Haven, extreme dissatisfaction was felt by a part of the colony with the result to which the trustees had come. At Commencement they reaffirmed their proceedings, and strove to remove all color of illegality from their former acts. One more attempt, and, as it proved, the last, was made during the session of the legislature that autumn to reverse the proceedings of the trustees, and to fix upon a new place for the college. The lower house voted that "the trustees be desired and directed to come as speedily as might be to this assembly to show the reasons of the late proceedings, and particularly why they or any of them had ordered a collegiate school to be built at New Haven without the allowance or knowledge of the assembly." This strong vote, which might imply a disposition to lay violent hands upon the charter, was so

far modified in the upper house, that the trustees were simply desired to appear before the legislature. They came accordingly, and after fruitless attempts to arrive at some agreement among themselves, drew up a memorial containing their answer to objections against New Haven as well as against the validity of their proceedings. Meanwhile, the two houses of the legislature were as discordant with one another as the two parties among the trustees. The lower house, as if the whole matter were still open and fell within their jurisdiction, put to vote the claims of different places to receive the college. Saybrook had but six votes out of between sixty and seventy. The house also divided between Middletown and New Haven, with a result of thirty-five votes in favor of the former, and thirty-two in favor of the latter. The upper house, on the other hand, planted itself upon the ground that the trustees had a right to decide where the college should be; that they had so decided in a legal meeting; and that all objections against the validity of their proceedings were frivolous. After some time it was agreed that the trustees should appear before the houses assembled in joint session, and make known the grounds which both sides had for their proceedings. Mr. Davenport of Stamford, in the name of the majority, vindicated them from all charges of irregularity, and set forth the factious management of the other side; while one of the dissatisfied trustees urged the point that the vote of the Board was not legal, inasmuch as a legal majority did not concur in it. The upper house, says a contemporary manuscript, "all as one man agreed that they would advise the trustees settling the school at New Haven to go on with it, esteeming their cause just and good; and they sent it down to the lower house where there were great throes, and pangs, and controversy, and mighty struggling: at length they put it to vote, and there were six more for the side of New Haven than the contrary; and thus, at length, the up river party had their will in having the school settled by the General Court, though sorely against their will, at New Haven; but many owned themselves fairly beat."

Of the vote which is mentioned in this extract we have found no other record. Its passage, probably, was a prelude to another resolution which, so far as the legislature was concerned, is to be regarded as a final adjustment of the whole affair. This resolution, as first passed in the upper house, ran as follows: "Whereas, it has been esteemed by some a considerable hardship upon the counties of Hartford and New London that a house for the collegiate school has been built at New Haven, at such a distance from these counties and

particularly, (as is alleged,) to the town of Hartford, which was anciently the seat of the principal administration of power in the colony, therefore for the peace and better regulation and balance of public benefit of affairs in the colony, and forasmuch as it will in all probability conduce very much to the good order and honor of our public administration to have a fair and suitable building of our courts of election in Hartford and for other public occasions,

Be it therefore enacted, &c., "That ten miles square of land in quantity in one entire piece shall be sold for the procuring of one thousand pounds, and for the encouragement of purchasers it is hereby ordered that the same be erected into a manor, and that the purchasers thereof shall have all the privileges of a township annexed thereunto. And it is further enacted, that £800 of the said thousand shall be applied to the erecting of a fitting house for holding of the assembly and other courts in Hartford in such form as this court shall direct. And that £200 of the said thousand be given to the trustees of the collegiate school for carrying on and finishing the house erected for said school in New Haven."

This bill, with the exception of the provision that the land to be sold should be erected into a manor, passed the lower house also, and thus peace was restored to the legislature and to most parts of the colony. It took a long time, however, for the dissentient trustees to come into the measures of the majority, as the legislature had done; nor were the people of Saybrook disposed to give up the library, yet remaining there, without a struggle. A portion of the students were retained at Wethersfield through the year 1718, by the influence of the disaffected trustees; a Commencement was held there in the autumn of that year, and although the General Court in October, 1718, ordered the students to repair to New Haven, they rendered only a formal obedience to this mandate and strove to injure the government of the college and to throw its affairs into confusion. At length the conciliatory measures of the majority of the trustees, united to the obvious fact that the college had a permanent footing at New Haven, overcame all opposition. Some of those who had shown the most active and even factious opposition to the measures which prevailed, returned to kindness of feeling, and became again friends of the college. In process of time one who had been the principal instrument in the rival project at Wethersfield was appointed to the rectorate of the college at New Haven, and earnestly promoted its interests.

The excited feelings of the people of Saybrook, were shown in violently resisting the attempts to convey the library to New Haven

—a resistance carried so far that the door of the house where it was kept had to be broken in, and the civil force of the county to be called out for the protection of the books, while the wagons for transporting the books were invaded by night, many of the books carried away, and some of the bridges torn down upon the road to New Haven. About two hundred and sixty volumes were wanting when the rest, above a thousand in number, were put up in the library of the new collegiate building.

The college had thus, from being almost an airy nothing, received a local habitation, and was also, in the course of the year 1718, destined to have that name given to its newly commenced building, by which, since the charter of 1745, the whole institution has been designated. The name of Yale College, was adopted after a liberal benefactor in England, Elihu Yale, Esq., of London, governor of the East India Company, who was descended from one of the original settlers of New Haven, and who in that year gave goods to the value of four hundred pounds. It may not be uninteresting to read here an extract relating to this subject from the manuscript, written at the time by a college officer. "The building went forward apace, so that the hall and library were finished by Commencement. A few days before Commencement, came the news of the good success of some gentlemen's endeavors to procure some donations from Great Britain. For at Boston arrived a large box of books, the picture and arms of King George, and two hundred pounds sterling worth of English goods, all to the value of eight hundred pounds in our money, from Governor Yale of London, which greatly revived our hearts and disheartened our opposers. We were favored and honored with the presence of his honor, Governor Saltonstall, and his lady, and the Hon. Col. Taylor of Boston, and the Lieutenant Governor and the whole Superior Court, at our Commencement, September 10th, 1718, where the trustees present,—those gentlemen being present,—in the hall of our new college, first most solemnly named our college by the name of Yale College, to perpetuate the memory of the honorable Gov. Elihu Yale, Esq., of London, who had granted so liberal and bountiful a donation for the perfecting and adorning of it. Upon which the honorable Col. Taylor represented Governor Yale in a speech expressing his great satisfaction; which ended, we passed to the church and there the Commencement was carried on. In which affair, in the first place, after prayer an oration was had by the saluting orator, James Pierpont, and then the disputations as usual; which concluded, the Rev. Mr. Davenport (one of the trustees and

minister of Stamford) offered an excellent oration in Latin, expressing their thanks to Almighty God and Mr. Yale under him for so public a favor and so great regard to our languishing school. After which were graduated ten young men, whereupon the Hon. Gov. Saltonstall, in a Latin speech, congratulated the trustees in their success and in the comfortable appearance of things with relation to their school. All which ended, the gentlemen returned to the College Hall, where they were entertained with a splendid dinner, and the ladies, at the same time, were also entertained in the Library; after which they sung the four first verses in the 65th Psalm, and so the day ended."

Our readers will not fail to have remarked that the ladies were put upon an intellectual diet, while the gentlemen had access to the good things which the hall afforded. Probably complaints would have come down to posterity, if the treatment of the two sexes had been reversed.

Scarcely had the college emerged from the waves of discord and reached a secure port, when it was exposed to another trial. In 1719 a new rector was chosen, the Rev. Timothy Cutler, then minister of Stratford, and a graduate of Harvard. He removed to New Haven, and had filled his office for something more than three years, when he declared his conviction that the Anglican theory of church government was the true one, and the orders of the New England ministry invalid. The only tutor, Mr. Daniel Brown, shared his opinions; and several neighboring ministers, most of whom were graduates of the college, and several had been officers, were more or less of the same way of thinking. That these gentlemen were honest in their persuasion seems undoubted; and, indeed, under the circumstances in which they found themselves, the first champions of an unwelcome theory in the colony, and dissenters from the church order there established, there was every motive for dishonest or timid men to conceal their opinions. There seems to be little doubt that they studied together the points of difference between the church of England and other sects which had separated from it, and that books in the library of the college wrought this change in their sentiments. A departure for the first time in the colony, and of so many at once, from the views of the New England churches, and a return to that church from which the pilgrims had fled into the wilderness, filled the minds of men with apprehension and gloom,—feelings which extended into the neighboring colony. I suppose that greater alarm would scarcely be awakened now, if the Theological Faculty of the college were

to declare for the church of Rome, avow their belief in transubstantiation, and pray to the Virgin Mary. A public disputation was held at the Commencement of 1722, in which Gov. Saltonstall, who had been a minister, took part against the Anglican doctrine; and the result was, that two of the gentlemen who had united with the rector in his views, professed themselves convinced that their ministerial ordination was valid, while the rector, persisting in his opinions, was excused by the trustees from further service. The tutor also resigned his post at the same time.

The four next years were passed in fruitless attempts to induce some one to accept the rectorate. This subject occupied the attention not only of the trustees but also of the legislature, for in 1724 we find that "a gracious message" was received by the trustees assembled in Hartford from the honorable, the legislature, by the gentlemen deputed from both houses, expressing their great desire that an able rector of Yale College may be provided and settled there as soon as may be. To which the trustees, after returning their hearty thanks for the generous concern of the legislature for the welfare of the school in this and former instances, reply that they had "chosen the Rev. Mr. Wigglesworth, Professor of Divinity at Cambridge, to be the rector; and in case of a disappointment, the Rev. William Russell of Middletown; and if he also should decline, the Rev. Elisha Williams of Newington." Before this, as we learn from college documents, Mr. Nathaniel Williams, of Boston, was applied to without success to fill the same office. At length, in 1726, the Rev. Elisha Williams, whom we have already had occasion to mention, was appointed to the rectorate, and, having accepted the office the next year, continued to discharge its duties until 1739, when he retired on the ground of impaired health. His rectorate seems to have been, on the whole, a time of growth and of success for the college. The most important event of its history, during these years, was Berkeley's donation of a farm at Newport, and of a large number of valuable books, amounting in all to about a thousand, of which eight hundred and fifty were given at one time in the year 1734.

On the resignation of Rector Williams, the Rev. Thomas Clap, minister of Windham, in Connecticut, was chosen his successor, and held the office for twenty-seven years, until 1766. He was a man surpassed by no one who has since taken his place, in vigor of mind, energy, and determination.

The original charter of the college having been granted at a time when the future circumstances of the institution were not clearly

foreseen, some of its provisions had been found inadequate, and a new charter, more ample in its provisions was needed. Rector Clap, therefore, made a draft of a new charter, which was revised by the Hon. Thomas Fitch, afterwards Governor of Connecticut; and having been approved by the trustees, it was sanctioned by the General Assembly, in May, 1745. His Excellency, Jonathan Law, at that time Governor of the State, is understood to have used his influence in procuring the passage of this charter through the legislature. In this new charter, the trustees, partners or undertakers of the collegiate school, as they had been denominated in the first charter, were incorporated by the name of *The President and Fellows of Yale College in New Haven*. This body, in common language, is called the *Corporation*. The charter of 1745 was much more liberal than the first, and granted every important power and privilege which the college needed, or will probably need at any future time. The name Yale, was now given unambiguously to the whole institution; and the college was fixed in New Haven.*

As the original college building now afforded but imperfect accommodations for the students, the President projected a scheme for the erection of a new college edifice. This building was completed in 1752. The expense of this new college was defrayed, partly from the proceeds of a lottery, and partly from money arising out of the sale of a French prize, taken by a frigate belonging to the colonial government. This edifice was built of brick, after the model of Massachusetts Hall, at Cambridge. It was called Connecticut Hall, on account of the generosity of the legislature; though nothing was paid directly out of the public treasury. There was great want, likewise, of a room for religious and literary exercises, more convenient than the college possessed, and the president proposed a plan for the erection of a chapel, with a library over it. The foundation of this new building was laid in the spring of 1761. In June, 1763, the chapel was opened for collegiate purposes; on which occasion a sermon was preached by the professor of divinity, in presence of the president and fellows, and a large number of other gentlemen. The means of building this chapel were furnished partly from the college treasury, partly from a grant by the legislature, and partly from individual subscriptions.

* President Clap, indeed, says, that in 1718, "the trustees, in commemoration of Gov. Yale's great generosity, called the *Collegiate School* after his name, *Yale College*;" and the trustees in their letter to Gov. Yale say the same thing; but the language of the vote is of different import. The trustees there say, "*statuimus et ordinamus nostras Aedes Academicas, patroni munificentissimi nomine appellari, et Yalense Collegium nominari.*"

In the year 1746, the Hon. Philip Livingston, of Livingston Manor, one of his majesty's council for the province of New York, having had four sons educated at the college, gave twenty-eight pounds ten shillings sterling to the president and fellows, to be appropriated as they should judge most for the advantage of the institution. The corporation, considering "that it would be most for the benefit and advantage of the college to have a professor of divinity, and that if the beginning of a fund for his maintenance was once laid, it was probable, that generous donations might be made in addition thereunto;" voted, "that the said sum be sequestered and appropriated for a fund for the maintenance of a professor of divinity in the college, and that, in commemoration of Mr. Livingston's generosity, the professor on the foundation be called and known by the name and title of Livingston professor of divinity." The General Assembly of the colony likewise, at their session in October, 1753, passed a resolve encouraging this object, in which, among other things, they said, "it was requisite that the students of the college should have the best instructions in divinity, and the best patterns of preaching set before them; and that the settling a learned, pious, and orthodox professor of divinity in the college, would greatly tend to promote that good end and design."

In September, 1756, the president conveyed to the college a lot of land for the use of the professor of divinity, and at the same time informed the corporation, that he had procured a subscription from sundry gentlemen in the colony, toward erecting for the professor a house which he had already begun to build. For this act of generosity on the part of the president, and for his "extraordinary care, diligence, and labor," in superintending the building of "Connecticut Hall," and his "prudence and frugality" in the disbursement of money for this object, all which labor had been gratuitous, the corporation voted him "their hearty and sincerest thanks."

In 1755, there was published an anonymous pamphlet, written by Dr. Benjamin Gale, of Killingworth, entitled, "*The present state of the Colony of Connecticut considered, in a Letter from a Gentleman in the Eastern part of said Colony, to his Friend in the Western part of the same,*"—the great object of which was to cherish the feelings of hostility against president Clap and the college, which were now becoming abundantly manifest. In reply to this pamphlet, there soon appeared another, entitled, "*The answer of the Friend in the West, to a Letter from a Gentleman in the East, &c.*" This pamphlet was likewise anonymous; but it is known to have been, with the exception of a few paragraphs toward the end, the pro-

duction of president Clap. The reply was conclusive, as to every material point; but Dr. Gale published several additional pamphlets, some with, and some without, his name. All these were very satisfactorily answered by the Rev. John Graham, of Woodbury. Pamphlets were published by others; but such was the state of public feeling, that it was not to be quieted by this kind of discussion. Accordingly, so strong was the conviction in the minds of numbers, that extraordinary measures were necessary to correct the abuses, which were believed to have got footing in the college, that, in the year 1763, nine gentlemen, the Rev. Edward Dorr of Hartford, the Rev. Hezekiah Bissel of Windsor, the Rev. Jonathan Marsh of New Hartford, Jedediah Elderkin, Eleazer Fitch, Josiah Talcott, Ebenezer Grant, Daniel Shelden, and Titus Hosmer, Esqrs, preferred a memorial to the General Assembly, in which they enumerated a great variety of grievances, which in their opinion called for the interference of the legislature, and concluded by praying, that "the said Assembly would immediately issue forth a *commission of visitation*, enabling some suitable persons to inquire into all the affairs of the said college; and either of themselves rectify all abuses, which they may discover, or make a report of what they shall find, with their opinion thereon, to the said Assembly at their next session." Besides the above nine gentlemen, five clergymen in the eastern part of the colony, the Rev. Ebenezer Devotion and the Rev. Stephen White, of Windham, the Rev. James Cogswell of Canterbury, the Rev. Josiah Whitney of Brooklyn, and the Rev. Benjamin Throop of Bozrah, made, at the same time, a communication to the legislature, in which they say, that they are not sufficiently acquainted with all the facts stated in the memorial, to warrant their signing it, but from "facts which are notorious," they request that the prayer of the petitioners may be granted.

This memorial was very powerfully supported by William Samuel Johnson and Jared Ingersoll, Esqrs., two of the ablest lawyers of the colony. The president first replied in writing to the memorialists, denying most of their allegations, as not founded in fact, or as gross perversions of the truth. He denied the right of visitation in the legislature; and, as to the disorders in the college, which were complained of, he produced the confessions of students, that they had been advised by others not members of the college, "to run into riots, rebellions, and disorders, to bring a scandal upon the college, and the Rev. President's government of it." The reply, after noticing every part of the memorial, closes in the following

manner:—"We would only beg leave to make this proposal to your honors, as patrons of the college, that if your honors, in your great wisdom, can find out a way to prevent the raising of such false reports and misrepresentations, and the students from being instigated and ensnared by bad advice from others, we will promise and engage, that this college shall be governed and kept in as good order as any college in the world."

After reading the written reply to the memorial, the president proceeded in an address to the legislature, to examine with great ability, the arguments of the counsel for the petitioners. The principal subject in controversy, was the right of the legislature to appoint visitors. The argument of President Clap on this point is published in his history of Yale College, in the second volume of Trumbull's History of Connecticut, in Farrar's Report of the Case of Dartmouth College, and in Balwin's history of Yale College. It is unnecessary to insert it here at length. The president admits, "that the general assembly, in their legislative capacity, have the same authority over the college and all the persons and estates belonging to it, as they have over all other persons and estates in the colony; and all that power, which is necessary for the good of the college, or the general good of the community; and that an especial respect and gratitude is due to them as its greatest benefactors; yet they are not to be considered as *founders* or *visitors* in the sense of the common law." He maintained that the ministers who made the first donation in 1700, were the *founders* of the college, and that by the common law, "he is the founder *quoad dotationem* (to whose heirs or successors the law gives the right of visitation) who makes the first donation." Chancellor Kent, in his address, referring to the claim, which was at this time set up, that the general assembly had a right by the common law to appoint visitors of the college, observes, "The president opposed this pretension in a counter memorial and argument drawn boldly, and with the confidence of a master, from his own mental resources. He grounded himself upon English authorities in the true style of a well-read lawyer, and successfully contended, that the first trustees and donors, prior to the charter, were the founders and lawful visitors, and that the right of visitation passed to the trustees under the charter, and then resided in the president and fellows. An argument of such solidity reminds us of the powerful discussions in the celebrated *Case of Dartmouth College*, in which the same doctrines were advanced and sustained by the decision of the Supreme Court of the United States."

The memorialists had asked, that there might be an "appear

from all and every sentence given by the authority of college, to the governor and council of the colony for the time being." To this the president replied, "that such an appeal would retard and obstruct all the proceedings of the authority of the college; it being found by universal experience, that, in all instances, wherein a liberty of appeal is allowed, the judgment appealed from, is of no force or efficacy, except that which may arise from the extraordinary trouble and charge of bringing the case to a trial in the court appealed to; that such a constitution would take the government of the college wholly out of the hands of those in whom it was originally vested, and be contrary to the charter."

It had been urged, that the appointment of visitors was necessary "to preserve orthodoxy in the governors of the college." To this it was replied, "that according to the original design of the founding of the college, the president, fellows, professor of divinity, and tutors, are to be admitted upon condition of their consent to the confession of faith agreed upon by the churches in the colony, 1798, and established by the laws of the government. That there is not the like security of the orthodoxy of visitors or any other in the civil order, except his most Excellent Majesty; who, by the act of Union, is obliged to consent to the Westminster Confession of faith, received in the Church of Scotland, as being *agreeable to God's Word, and containing the sum and substance of the doctrine of the reformed churches*." This, at the time, was understood to be an intimation, that if the project of appointing visitors of the college was persisted in, the president and fellows would appeal to the king. The legislature took no measures on the memorial, and the subjects of it have never since been publicly agitated.

President Clap resigned in September, 1766, and Rev. James Lockwood, of Wethersfield, was elected his successor—and on his declining, Rev. Naphtali Daggett, Professor of Divinity in the college, was appointed President. During his administration, a desire having been expressed in the House of Representatives, to know something of the college laws, and copies having been sent in printed in the Latin language, an opinion was intimated "that the laws had better be in English," and they were soon after, for the first time, published in the vernacular tongue. Whether as an inducement or reward for compliance, does not appear, but in the same year a grant of about £100 currency, was made from a duty on rum toward the support of a tutor for one year.

If the laws for the government of the college in general were published in Latin, the "Laws for the government of the Fresh-

men," in particular, were printed in good plain Saxon English, as will appear in the following extracts from a code of college customs printed in 1764, entitled, "FRESHMAN LAWS."

It being the duty of the seniors to teach Freshmen the laws, usages, and customs of the college, to this end they are empowered to order the whole Freshman class, or any particular member of it, in order to be instructed or reproofed, at such time and place as they shall appoint; when and where every Freshman shall attend, answer all proper questions, and behave decently. The seniors, however, are not to detain a Freshman more than five minutes after study-bell, without special order from the President, Professor, or Tutor.

The Freshmen, as well as all other undergraduates, are to be uncovered, and are forbidden to wear their hats (unless in stormy weather) in the front door-yard of the President's or Professor's house, or within ten rods of the person of the President, eight rods of the Professor, and five rods of a Tutor.

The Freshmen are forbidden to wear their hats in college yard (except in stormy weather, or when they are obliged to carry something in their hands) until May vacation; nor shall they afterwards wear them in college or chapel.

No Freshman shall wear a gown, or walk with a cane, or appear out of his room, without being completely dressed, and with his hat; and whenever a Freshman either speaks to a superior, or is spoken to by one, he shall keep his hat off, until he is bidden to put it on. A Freshman shall not play with any members of an upper class, without being asked; nor is he permitted to use any acts of familiarity with them, even in study-time.

In case of personal insult, a Junior may call up a Freshman and reprehend him. A Sophomore in like cases must obtain leave from a Senior, and then he may discipline a Freshman, not detaining him more than five minutes, after which the Freshman may retire, even without being dismissed, but must retire in a respectful manner.

Freshmen are obliged to perform all reasonable errands for any superior, always returning an account of the same to the person who sent them. When called, they shall attend and give a respectful answer; and when attending on their superior, they are not to depart until regularly dismissed. They are responsible for all damage done to any thing put into their hands, by way of errand. They are not obliged to go for the undergraduates in study-time, without permission obtained from the authority; nor are they obliged to go for a graduate out of the yard in study-time. A Senior may take a Freshman from a Sophomore, a Bachelor from a Junior, and a Bachelor from a Senior. None may order a Freshman in one play-time, to do an errand in another.

When a Freshman is near a gate or door, belonging to college or college yard, he shall look around, and observe whether any of his superiors are coming to the same; and if any are coming within three rods, he shall not enter without a signal to proceed. In passing up or down stairs, or through an entry or any other narrow passage, if a Freshman meets a superior, he shall stop and give way, leaving the most convenient side—if on the stairs the bannister side. Freshmen shall not run in college yard, or up or down stairs, or call to any one through a college window. When going into the chamber of a superior, they shall knock at the door, and shall leave it as they find it, whether open or shut. Upon entering the chamber of a superior, they shall not speak until spoken to; they shall reply modestly to all questions, and perform their messages decently and respectfully. They shall not tarry in a superior's room, after they are dismissed, unless asked to sit. They shall always rise, whenever a superior enters or leaves the room, where they are, and not sit in his presence until permitted.

These rules are to be observed not only about college, but every where else within the limits of the city of New Haven.

Even so late as in 1800, we still find it laid down as the senior's duty to inspect the manners and customs of the lower classes, and especially of the Freshmen; and the duty of the latter to do any proper errand, not only for the authorities of the college, but also

within the limits of one mile, for resident graduates and for the two upper classes. By degrees the old usage sank down so far, that what the laws permitted was frequently abused for the purpose of playing tricks upon the inexperienced Freshmen; and then all evidence of its ever having been current disappeared from the college code. The Freshmen were formally exempted from the duty of running upon errands in 1804.

Dr. Daggett resigned his office as president, in April, 1777, but continued to discharge the duties of the professorship of divinity; and while thus engaged, in July 5, 1779, when a British expedition landed at New Haven, he shouldered his musket, and went out with his fellow citizens in defense of the town. He was taken prisoner, and treated with severity. That his instructions and example did not dampen the fire and patriotism, and military humor, is evident from the fact that some of the best officers among the Connecticut troops passed almost immediately from the college to the duties of the camp; among them were David Humphreys, Nathan Hall, and Ebenezer Huntington.

In September, 1777, the corporation elected the Rev. Ezra Stiles, D. D., of Newport, R. I., to the presidency. Dr. Stiles graduated at the college in 1746; had filled the office of tutor for six years, and was well acquainted with the circumstances and wants of the institution.

In 1784, a pamphlet was published in New Haven, entitled, "*Yale College subject to the General Assembly*," in which there was a feeble attempt to answer the argument of President Clap, in the case of the memorial of 1763. At the session of the General Assembly, in May of the same year, 1784, four different petitions were presented to that body; the general object of which was, to procure some legislative interference, to alter the college charter, or to establish a new college under State patronage. But the great obstacle to this latter project, was, that the old objection, of its being unjust to tax the poor for the benefit of the rich, applied just as well to a new institution as to the old; and to urge this objection, according to usage, as decisive against any appropriation to Yale College, and, in the next breath, in favor of a new college,—to state the matter of fact, that the competent endowment of public establishments for education, is to tax the rich for the benefit of the poor,—required a degree of versatility, to which the politicians of that day had not attained. Accordingly, nothing was done.

The corporation continued to petition, occasionally, for aid, but

were regularly refused. The college was represented by numbers, both within the legislature and without, as controlled by bigotry, as opposed to all improvements in education, and as undeserving of public support. At the session of the General Assembly in October, 1791, a very able committee was appointed by both houses, to confer with the corporation on the state of the institution, and to report to the legislature at their session in the following May. This committee was composed of His Honor Lieut. Gov. Wolcott, the Hon. Stephen Mix Mitchell, of the council, and Jonathan Ingersoll, Uriah Tracy, and Asher Miller, Esqrs., of the House of Representatives. All these gentlemen had been educated at the college—were supposed, and justly, to be very friendly to its interests; but to be at the same time, in favor of some change in its constitution, and disposed to make their inquiries something more than a matter of mere form. The conference was held at the college, in January, 1792, and a majority of the committee was present. The corporation communicated to them without reserve, the state of their funds; their mode of managing the college property, as far back as the committee were disposed to investigate; exhibited the condition of the buildings and the plan of instruction. Several days were spent in this inquiry; and if a committee of visitation had been issued by the legislature, the investigation would not have been more thorough. In May, 1792, the committee made their report to the General Assembly. In this they say, that “during the whole progress of the inquiry, we found the corporation disposed to communicate, without reserve, every circumstance respecting the care and management of the institution under their government.” They say, “that the literary exercises of the respective classes, have, of late years, undergone considerable alterations, so as the better to accommodate the education of the undergraduates to the present state of literature.” “We further find,” they add, “that the treasury is in a much better condition than we apprehended. In justice to the corporation, we are bound to observe, that their finances have been managed with great dexterity, prudence, and economy.”

This report was in direct contradiction to various incorrect statements respecting the college, which had been industriously circulated, and which had gained some credit with the public. It was received with general satisfaction in both houses of the legislature; and that body was prepared to consider favorably any well digested plan for the benefit of the college, which should be laid before them. Such a plan was prepared by the treasurer of the college, the Hon.

James Hillhouse; and, at his suggestion, it was introduced into the Assembly. The outlines of the project were these:—A considerable amount of taxes, not collected, which had been imposed to pay the State creditors, would probably not be needed for their original object; as the United States were about assuming the State debts. The proposition was, that the balances of these taxes should be paid into the hands of commissioners, to be applied, on certain conditions, to the improvement of the college. One important recommendation of this scheme was, that it required no new tax. It was, moreover, urged, that this money might be with propriety retained by the legislature, for some public object; and that no object of general interest in Connecticut, more needed legislative patronage, or more deserved it, than the college. The principal condition upon which this grant was to be made was, that “the governor, lieutenant governor, and six senior assistants in the council of this State, for the time being, shall ever hereafter, by virtue of their said offices, be trustees or fellows of said college; and shall, together with the present president and fellows of said college, and their successors, constitute one corporation, by the name and style mentioned in the charter of said college; and shall have and enjoy the same powers, privileges, and authority, in as full and ample a manner, as though they had been expressly named and included in said charter: and that in case of vacancy, by death or resignation, or in any other way, of any of the present fellows of said college, and their successors, every such vacancy shall forever hereafter be supplied by them, and their successors, by election, in the same manner as though this act had never passed: and that the said governor, lieutenant governor, and senior assistants, or any four of them, together with the present fellows of said college, and their successors, or any six of them, shall, at all future meetings of said corporation, be a quorum for the transaction of business.”

This proposition was favorably received by the Assembly; the act grounded upon it, passed unanimously in the Council, and with little or no opposition in the House of Representatives. It was not to take effect unless, “accepted and approved” by the old board, within a year. In June of the same year, the corporation voted the acceptance of the act unanimously. No definite proposition had ever before been presented to the president and fellows, for the enlargement of their number, by the introduction of civilians, accompanied by any thing beyond a general assurance of patronage. The case was now different; and there was little hesitation in acceding to the proposal. The object of the memorialists, in 1763,

was to place the college entirely in the power of the legislature, to be shaped and molded from time to time, according to the will of that body. The opposition of President Clap to a commission of visitation, was not from any unwillingness to have the state and circumstances of the college made public; but from a conviction, that the subjection of the institution to the varying will of a popular body, would be fatal to its best interests. The firmness and wisdom with which that measure was resisted, and with which other measures were met at subsequent times, which had the same general object in view, confer on the president and fellows the highest honor. The constitution of the college, by this final arrangement, seems as little liable to objection as any which could be devised. It secures, perhaps, as much stability to the institution as is attainable; while the constant presence and co-operation in the board of members belonging to the government, secures the advantage of the opinions and counsel of men, in various stations of life, and gives a sufficient publicity to all proceedings. The honor of originating this measure, and of securing its passage through the legislature, belongs to the treasurer, Mr. Hillhouse. No one has pretended, that without him, any thing would have been, or could have been, done on this subject.

The grant which was made to the college in 1792, of the residue of certain taxes, was encumbered with the condition, that fifty per cent. of what should be paid into the hands of the commissioners appointed for this purpose, should be subject to the future disposal of the legislature. The final adjustment of this matter had not taken place, when Dr. Dwight came into the presidency, in 1795. It had been found, that to place the college on such a foundation as to meet the increasing demands of education, and the expectations of the public; more money was necessary, than the original grant contemplated. Accordingly, at the session of the legislature in May, 1796, the corporation petitioned for the relinquishment of the fifty per cent. The petition was powerfully supported in an address by the president, to both houses of the General Assembly. An act was finally passed, by which the fifty per cent. was relinquished by the legislature, provided the college would pay into the State treasury a certain sum, amounting to somewhat more than thirteen thousand dollars. It may not be improper to add here, that this act of the legislature was very extensively unpopular, and many individuals who were active in procuring its passage, suffered in their political standing; whether to the honor or disgrace of Connecticut, posterity will judge. Dr. Dwight, on several other occasions, when the college asked for aid, addressed the legislature

with great ability, but without success. A majority of the members would admit, that a strong case had been made out; but the act of relinquishment in 1796 was remembered, and "the time for acting had not yet arrived."

At the session of the legislature in 1822, a committee of that body was instructed to inquire what amount of funds had been granted to Yale College by the State, from the foundation of the institution to that time. From the report of this committee, it appears, that from the establishment of the college in 1700 to the year 1792, the whole amount which the college had received in any manner from the legislature, was \$24,399 10. But of this sum, \$2,220 was raised by a lottery granted for the benefit of the college in 1747. From five to six thousand dollars were granted out of the avails of a French prize, brought into New London by an armed vessel belonging to the State, and from other sources unconnected with the ordinary supplies of the State treasury. Most of the remainder was derived from the annuity, granted in 1701, in the first college charter. To the year 1792, therefore, the Connecticut treasury had not been greatly burdened by the support of Yale College. All the grants, in whatever manner made, amount to but little more than two hundred and fifty dollars a year. The grant made in 1792, when the number of the corporation was enlarged by the admission of civilians into that body, was estimated at \$40,629 80, including however the additional sum received in 1796. In 1816, a sum of money, received from congress to reimburse certain expenses which the State had incurred in the last war with Great Britain, was appropriated by the legislature to various objects of public utility; and of this sum the college received \$8,785 70. In 1831, from a *bonus* paid into the State treasury for the charter of a bank, the college received \$7,000. The grant made to the medical institution in 1814, was not for the aid of the college. It was, besides, not made directly to the corporation, but to commissioners, who superintended the expenditure of this money. These are all the sums which the college has received from the legislature of Connecticut, directly or indirectly, in the one hundred and fifty-three years since it was founded.

Rev. Timothy Dwight, D. D., was chosen president on the death of Dr. Stiles, in June, 1795. He was born in Northampton, Mass., in May, 1752; graduated at Yale College in 1769; was elected tutor in 1769, and served as chaplain in the army from 1777 to 1782. His administration and instruction commence a new era in the history of Yale College.

XVII. TIMOTHY DWIGHT AS A TEACHER.

BY DENISON OLMSTED, LL. D.

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MORE than forty years have now elapsed since the Rev. Timothy Dwight, D. D., President of Yale College, closed his earthly labors; but there still survive numbers of his former pupils, who are never weary of quoting his authority to the youth of the present generation, or of expressing their unbounded admiration of his character as a Teacher. Numerous memoirs of President Dwight have been published, and high encomiums have been passed upon him as an instructor and governor of youth. In the present article, my views are more limited. I do not propose to write his biography, but to analyze, more fully than has hitherto been done, his character as a TEACHER; to inquire what were the elements that were combined in him to form so exalted a model; and to explain his method of teaching, or mode of conducting, practically, the education of youth.

It was my good fortune to come under the instruction of President Dwight when he was at his culminating point. The class of 1813, to which I belonged, was the last, or last but one, which he taught before his health began to decline; and he died in January, 1817, after great sufferings, protracted through the two preceding years. But during the senior year of the class of 1813, nothing could exceed the vigor of mind and body which he exhibited, and his energies were put forth with unequalled power and zeal in our instruction. He was then a little turned of sixty, but entered into every duty with untiring industry, and unabated vigor. It was a mystery to us how he could feel so deep an interest in going over ground, from day to day, which we well knew must have been reiterated successively for many previous years. I think, however, we shall be able to clear up this mystery, as we analyze more fully the peculiar characteristics of his mind and heart. In the autumn of 1815, I entered upon the office of Tutor, and for a year and a half observed him in the government, as I had before known him chiefly in the instruction, of the college. From these favored opportunities of being personally acquainted with the President, and from having been near him during his last sickness,

and at the time of his death, I hope I may, without impropriety, speak often from my own recollections. This, I suppose, will be thought more allowable, since the number of his pupils who still survive are dwindled to a small remnant, and will soon have passed away.

It is, we have said, the main object of this article to portray the character of President Dwight as a *teacher*; but since every quality of his mind and heart helped to form that character, it is essential to the full development of our subject, to review, briefly, his peculiar intellectual and moral constitution, which we shall endeavor to show to have been singularly adapted to form the great teacher. We shall also pass in review his course of life, previous to his entering on the presidency of Yale College, and show how every thing contributed to qualify him for that exalted station.

It can not be doubted that Dr. Dwight possessed by nature one of the highest order of minds; a mind in which the faculties were all great, and all in harmonious proportion. It afforded one of the finest examples I have known of the "well-balanced mind." Genius is often characterized by the great predominance of some individual faculty, as an extraordinary memory, or a remarkable mechanical talent, while the other mental powers are quite ordinary, and even sometimes deficient. One has a vivid imagination, but has little taste or talent for scientific truth. He may be a poet, but can hardly be a philosopher. Another has a mighty intellect, but is destitute of a sense of the sublime and beautiful, in nature and art. He may be a mathematician, but can hardly be a poet or an artist. It is the union of intellect and imagination, both strong and in due proportion, that constitutes the well-balanced mind. In an instructor of youth, no quality is more valuable than this; and if we analyze carefully the mental and moral constitution of President Dwight, we shall find unequivocal marks of the happiest union of all these noble elements.

First, let us view him as a man of *INTELLECT*. From infancy he evinced *great aptness to learn*. Under the guidance of a mother who was among the most distinguished of her sex for strength and cultivation, (daughter of the great President Edwards,) the nursery itself was his earliest school-room. She began to instruct him almost as soon as he was able to speak; and such was his eagerness, as well as his capacity for improvement, that he learned the alphabet at a single lesson, and before he was four years old was able to read the Bible with ease and correctness. A great proportion of the instruction which he received before he was six years old, was at home with his mother. Twice every day she heard him repeat his lesson. When

this was recited, he was permitted to read such books as he chose, until the limited period was expired. During these intervals he often read over the historical parts of the Bible, and gave an account of them to his mother. So deep and distinct were the impressions which these narrations then made upon his mind, that their minutest incidents were indelibly fixed upon his memory.* At the age of six, he was sent to the grammar school, where he early began to importune his father to permit him to study Latin. This was denied, from an impression that he was too young to profit by studies of that description; and the master was charged not to suffer him to engage in them. It was soon found to be in vain to prohibit him; his zeal was too great to be controlled. Not owning the necessary books, he availed himself of the opportunity, when the elder boys were at play, to borrow theirs; and, in this way, without the father's knowledge or the master's consent, he studied through the Latin grammar twice. When the master discovered the progress he had made, he applied earnestly to his father, and finally obtained a reluctant consent that he might proceed, though every effort short of compulsion was used to discourage him. He pursued the study of the languages with great alacrity, and would have been prepared for admission into college at eight years of age, had not a discontinuance of the school interrupted his progress, and rendered it necessary for him to be taken home, and placed again under the instruction of his mother.† Throughout the subsequent course of his academic education, and in all his future life, he evinced the same extraordinary aptness to learn.

Power of application was another trait which indicated that his was one of the higher order of minds. The President himself thought so highly of this feature as characteristic of a superior mind, that it was a favorite saying of his that "genius is nothing but the power of application." In his own case, this power was exhibited in its highest intensity, first in the school boy, then in the college student, and afterward in the professional man. When engaged in the composition of sermons, or any other literary performance, not only did the conversation of those around him not interrupt his course of thinking, but, while waiting for his amanuensis to finish the sentence which he had last dictated, he would spend the interval in conversing with his family or his friends, without the least embarrassment, delay, or confusion of thought. His mind took such firm hold of the subject which principally occupied it, that no ordinary force could separate it from its grasp. He was always conscious of the exact progress he had made in every subject. When company or any other occurrence

* Memoir prefixed to Dwight's "Theology." † Memoir.

compelled him to break off suddenly, it would sometimes happen that he did not return to his employment until after the expiration of several days. On resuming his labors, all he required of his amanuensis was to read the last word or clause that had been written, and he instantly would proceed to dictate, as if no interruption had occurred. In several instances he was compelled to dictate a letter at the same time that he was dictating a sermon. In one instance, a pressing necessity obliged him to dictate three letters at the same time. Each of the amanuenses was fully occupied, and the letters required no correction.*

The power of *retaining* what he had once learned, President Dwight possessed in an equally remarkable degree. The art of methodizing, as he asserted, lay at the foundation of this power; and no man, it is believed, ever availed himself more fully of the advantages of this art. His own acquisitions were laid up in separate compartments of the mind, like the wares of a merchant on his shelves, and he could, with equal readiness, lay his hand on his mental stores, and bring them out at a moment's warning. It was his practice, after short intervals, perhaps every evening, to distribute his new acquisitions in a manner like that of a compositor in restoring his types to their appropriate cells. It was an evidence of the vigor with which his own thoughts were conceived that, when once digested into the form of a discourse or an essay, and methodically arranged, he never forgot them. A sermon composed, but not written, and laid up in his mind, was ready to be summoned into use at any future time, and could be recalled, after a long interval, with hardly the loss of an idea that entered into its original structure. For a great portion of his life, from his youth upward, he was unable to use his eyes for reading or writing. To a mind less given to meditation, or less eager for knowledge, this loss might have been fatal to aspirations after high intellectual attainments; but to him, perhaps, it was hardly a misfortune, urging him, as it did, to cultivate to their highest degrees of perfection the powers of reflection and the art of methodizing. But while we may justly ascribe to these aids much influence, yet it can hardly be doubted that he possessed by nature unusual strength and tenacity of memory, as was evinced in childhood by his learning the alphabet at a single lesson, and in youth by the rapidity with which he acquired knowledge, and throughout his life by the unfailing certainty with which he retained what he had once learned.

Intense love of knowledge, another characteristic of great minds, was also exhibited by President Dwight in its highest degree. The

* Memoir.

ardor with which he sought for it, in every useful form, might be compared to that of the miser for gold, so far as it was the original bent of his mind; but in regard to the high uses he always had in view, as a minister of the gospel, and as a teacher, it more resembled the effort of the philanthropist to acquire wealth, in order that he may relieve want, and save the souls of men. This universal thirst for knowledge led him to imbibe it from every source. Hence the variety and extent of his knowledge on every point that became the subject of discussion, or the topic of conversation, amazed every body. One who had attended on his instructions during the senior year, and had often admired his inexhaustible stores of information on the highest subjects of education, finding him equally at home in theology and ethics, in natural philosophy and geography, in history and statistics, in poetry and philology, would have his admiration heightened, if he chanced to visit him, as it was my good fortune to do, in his garden, and heard him discourse on gardening and the cultivation of fruit trees. This unbounded love of knowledge, in every form, attended as it was by a due estimate of the relative value of each kind, fulfilled one of the highest requisites for the President of a college, both as it fitted him to appreciate the importance of all the separate departments of instruction, respectively, and as it prepared him to impart to those under his immediate instruction a boundless variety of useful information.

The *reasoning powers* of President Dwight were such as became a mind of the highest order. His sermons and other published works afford evidence of this; but his pupils received a still stronger impression of his powers of argument in the recitation room, particularly in his decisions of questions debated before him, where a course of reasoning was conducted with every advantage which could be derived from an array of all the most important facts that bore upon the case, from great felicity of illustration, from the most lucid arrangement, and from the severest logic.

Such were the leading characteristics of President Dwight as a man of *intellect*, each of which, it will readily be perceived, had a most important bearing on the character which it is our main purpose to delineate, namely, that of the great teacher. Next, let us view him as a man of *IMAGINATION*. It is well known that in early life Dr. Dwight figured as a poet. Indeed, his "*Conquest of Canaan*," a sacred epic poem, in eleven books, written before he was twenty years of age, evinced a strong native bent for works of imagination. A dissertation, delivered at the public commencement of Yale College, on taking his master's degree, on the "*History, Eloquence, and Poetry of the*

Bible," was received with extraordinary favor. A copy was immediately requested for the press, and it was afterward republished, both in this country and in Europe. His patriotic songs, composed during the revolutionary war, some of which were great favorites with the army; his "*Greenfield Hill*," published during his residence at that place; and his hymns, which are still sung with delight in our sacred choirs, afford the most satisfactory evidence that he was a man of lofty imagination as well as of profound intellect.

About the year 1770, commenced a great era in the history of the study of polite literature in Yale College,—an era initiated by four remarkable geniuses, Trumbull, Dwight, Humphreys, and Barlow. Trumbull was of the class of 1767, Dwight of the class of '69, Humphreys of the class of '71, and Barlow of the class of '78. Trumbull and Dwight were colleague tutors, and a congeniality of taste for classical studies and the muses produced a strong intimacy between them. Humphreys and Barlow, though a little later, fell into the same circle, and cultivated with the others the belles lettres studies. Trumbull's "*McFingal*" justly acquired for him a celebrity above that of the others; but they each and all contributed to create and diffuse a taste for elegant literature among their countrymen, and especially in Yale College. Previous to that period, after the college had been in operation full seventy years, no attention was paid to English literature. The course of studies consisted of the dead languages, mathematics, syllogistic logic, and scholastic theology. The style of composition, even of the officers of the college, was stiff and pedantic, and savored of the quaintness of the old theologians. The college had never produced a single poet, or an elegant writer.* The study of rhetoric had till then been almost entirely neglected. Through the influence of three contemporary tutors, Howe, Trumbull, and Dwight, a taste for those pursuits was excited, and the art of speaking began, for the first time in the history of the college, to be cultivated. Dwight, especially, both by his example and his instructions, produced a great reform in the style of writing and speaking. He delivered to the students a series of lectures on style and composition, on a plan very similar to that contained in Blair's lectures, which were not published until a considerable time afterward.

Of the constellation of poets which arose simultaneously at this period, Trumbull, no doubt, was the principal star. But several circumstances contributed, at the time of the publication of Dwight's "*Conquest of Canaan*," to render it less popular than it deserved to be. The country contained but few persons of cultivated imagina-

* Governor Livingston, of New Jersey, of the class of 1741, ought, perhaps, to be excepted.

tion, and few lovers of sacred poetry especially. There was, in fact, among our leading men, in civil life particularly, a strong bias toward infidelity. Moreover, on literary as on other subjects, the United States had not, until a much later period, begun to exercise for herself an independent judgment, but took her lead from the decisions of the British press; and it was long the practice of British critics to treat every literary effort of Americans with contempt. Hence a strong prejudice was imbibed against the poetical merit of the "*Conquest of Canaan*," on its first publication; and this sentiment became hereditary, and has descended to the present day. Even now every body condemns, while nobody reads, the "*Conquest of Canaan*." Having myself attentively read it more than once, I feel authorized to claim that, whatever blemishes it may have in some nice points of taste, it affords abundant evidence of a vivid imagination, great facility in versifying, and a high power of appreciating the sublime in sentiment, and the beautiful in nature and art. Were it my purpose to criticise this neglected poem, I should insist upon the poetical merit of many individual passages; but all I propose at present, is to view President Dwight as a man of imagination, in contradistinction to the man of mere intellect. Of this element in his character, as forming a part of a well-balanced mind, and one of the highest order of minds, I feel safe in claiming his poetry as affording abundant evidence. Were further proof necessary, I might adduce his fondness for natural scenery, and his delight in ornamental gardening. A warm imagination is obvious enough in his prose writings, and is even recognized in his sermons, especially where the subject admits of figurative language and flights of fancy. It is not, however, inconsistent with our views of what constitutes the well-balanced mind, to admit that, in the mental constitution of President Dwight, the intellect greatly preponderated over the imagination.

But it will be proper, secondly, to estimate the MORAL no less than the mental constitution of President Dwight, in its bearing upon the character of the great teacher. It was not until he had reached the age of twenty-two years, while he was Tutor in college, that he made a public profession of religion; but the basis of his moral character was laid in early childhood, by the influence and counsels of his gifted mother. "She taught him," says his biographer, "from the very dawn of his reason, to fear God, and keep his commandments; to be conscientiously just, kind, affectionate, charitable, and forgiving; to preserve, on all occasions, the most sacred regard to truth; and to relieve the distresses and supply the wants of the poor and unfortunate. She aimed, at a very early period, to enlighten his conscience, to make

him afraid to sin, and to teach him to hope for pardon only through the righteousness of Christ. The impressions thus made upon his mind in infancy were never effaced." He seemed to possess an innate love of truth, which exhibited itself to his pupils in what sometimes appeared to them an almost over nicety in regard to all the minute and exact circumstances attending the facts on which his statements were made, and in his particularity in mentioning his authorities when the facts were derived from the statements of others. "Tell truth to a hair's breadth," was a precept which he ever enjoined on his pupils.

President Dwight was also a man of warm attachments and most tender sympathies. Nothing could exceed the strength of his domestic affections. But his heart was too large to confine its exercises to the family circle. The same kind affection glowed, in proportionate measure, toward his pupils, and toward numerous private friends whom he had bound to himself in every stage of life. When they were afflicted, he was moved to tears; when they were prosperous, he shared in their joy. I remember an instance of his tenderness on the occasion of the death of one of the Tutors, Mr. Mills Day. The President was absent at an ecclesiastical meeting, returning a few hours after his death. As he came into the chapel to attend evening prayers, and passed by the seat where Mr. Day usually sat, his countenance changed, and his tears began to flow. In reading the Bible before prayers, his voice was tremulous; and when he came, in the course of his prayer, to allude to the mournful event, he was so overcome that his voice nearly failed him, and his cheeks were wet with tears. In a funeral prayer at the house of a friend, who had lost a son of much promise, he was equally overcome. Indeed, it was not uncommon for him to betray deep emotion in the recitation room, when relating an instance of suffering or sorrow. Above all this native tenderness, ruled the most expansive benevolence,—the benevolence of the gospel,—embracing within its boundless sphere every thing susceptible of happiness or misery, and ever yearning for the promotion among men of freedom, knowledge, happiness, and pure religion.

Such was the intellectual, and such the moral constitution which lay at the foundation of that character, which the whole education or course of life of President Dwight helped to mould into the great teacher. Let us therefore, thirdly, pass in review his peculiar *mode of life, or education*, so far as it contributed to form and perfect that character.

The manner in which he himself was taught, from infancy, by a mother so singularly qualified to direct the early education of a child of genius, was ever present to his mind as a model. He was almost

born a teacher, for I once heard his sister relate that, when only four years old, he was found in a retired place teaching a company of little boys lessons from the Bible. His father was an educated man, but the cares of business called him so much from home that the care and instruction of the children devolved chiefly on the mother. His house, however, was the resort of much company of the most elevated class, and their conversation inspired our young scholar with the love of general knowledge, and every fragment of valuable information was treasured up and never lost. These opportunities helped to form his taste for those topics which enter into intelligent conversation, such as public affairs, and the reigning matters of discussion of the day. Here, perhaps, he first caught the inspiration which in after years animated his own love of intelligent conversation, which he ever named among his highest sources of enjoyment. It was all the recreation he needed from severe study; and of all his powers those of conversation were among the most extraordinary. He entered college at thirteen, having made acquisitions considerably in advance of those required at that time for admission. For the first two years of his college life, the institution was in an unsettled state, with its study and discipline much impaired, and he always regarded this period of his education as almost lost, having contracted a fondness for games and other idle amusements; but, through the influence of a wise and zealous tutor, he was roused to nobler aspirations. At the beginning of his junior year, being fifteen years old, he engaged in his studies with excessive application, extending them into regions far beyond the college curriculum. At the close of his academic course, the President sent for Dwight and Strong,* and informed them that in view of the officers of the college they were at the head of the class, and equally deserving of the highest honor; but, as Strong was the elder of the two, it would be given to him at that time, and to Dwight on taking his master's degree.

He had no sooner completed his college course than he entered at once on the life of a teacher, at the early age of seventeen, a profession which he pursued with but little interruption for fifty years. His first essay was at a grammar school, at New Haven, which he kept for two years with great success, securing the strongest attachment of the pupils, and the highest approbation of their parents. During these two years he made great advancement in literature and science, dividing every day according to an exact method, of which six hours were spent in school, and eight hours in the severest application to study, leaving only ten hours for all other purposes. His studies

* The late Rev. Nathan Strong, D. D., of Hartford.

embraced a wide range of subjects, scientific as well as literary, comprehending several branches then scarcely known in this country, among which were the Calculus and Newton's Principia. But his talents, as an instructor, met with a more appropriate field in the situation of Tutor in Yale College, to which place he was elected in September, 1771, being then past nineteen years of age. The period of his tutorship continued for six years, and he ever afterward referred to it as a most important epoch of his life. Here his great powers of teaching were fully developed. "When he entered upon the office, more than half the members of his class were older than himself; and the freshman who waited on him was thirty-two years of age. Notwithstanding a circumstance generally so disadvantageous, he proceeded in the discharge of his official duties with firmness and assiduity; and in a short time gained a reputation for skill in the government and instruction of his class, rarely known in the former experience of the college."* We have already adverted to the agency which he and his associate instructors, especially Howe and Trumbull, exerted in inspiring a new taste for the studies of eloquence and polite literature. The "*Conquest of Canaan*" was one of the fruits of this period, having been commenced in 1771, when he was only nineteen years of age, and finished in 1774, at the age of twenty-two.

The first class which he instructed graduated in 1775; the year before the Declaration of Independence. "At that time he delivered a valedictory address, every where sparkling indeed with brilliant imagery, but every where, also, fraught with strong thoughts and noble conceptions. In two points of view it deserves notice. It unfolds to his pupils the duty of fixing on a very high standard of character, as intelligent and as moral beings, in a manner which proves at once that this was literally the rule which governed his own conduct, and that he was admirably qualified to influence others to adopt it. It also communicates to them views of the growth and ultimate importance of this country, which were at once new, noble, and prophetic.

"In March, 1777, he was married to Miss Mary Woolsey, the daughter of Benjamin Woolsey, Esq., of Long Island, the class-mate, room-mate, and intimate friend of his father. They had eight sons, of whom six survived their father.†

"In May, 1777, the college was broken up. The students left New Haven at the commencement of the vacation, and pursued their studies, during the summer, under their respective Tutors, in places

* Memoir.

† Two only still survive: James Dwight, Esq., of New Haven, and Rev. William T. Dwight, D. D., of Portland, Me.

less exposed to the sudden incursions of the enemy. Mr. Dwight retired with his class to Weathersfield, and remained with them till September. Early in June, he was licensed as a preacher, and, besides instructing his class, he supplied the pulpit of the neighboring village of Kensington. It being understood that the existing head of the college would relinquish his connection with it, the students, as a body, drew up and signed a petition to the Corporation, that Mr. Dwight might be elected to the Presidency. This evinced an extraordinary respect for his character as a teacher, being then only twenty-five years of age. It was owing to his own interference that the application was not formally made." *

The country was now in the midst of the revolutionary war. Eager to have some part in the public service, Mr. Dwight accepted the appointment of chaplain to General Parsons' brigade, which was part of General Putnam's division in the army of the United States. He sedulously devoted himself to his appropriate duties. The troops who composed the brigade were mostly Connecticut farmers; men who had been religiously educated, and who were willing to listen to the truths of the gospel even in a camp. On the Sabbath they heard him with profound attention. During the week they beheld him exerting himself, as far as lay in his power, to instruct them in morals and religion. Several of his discourses delivered to the whole army, owing partly to their intrinsic merit, and partly to the feelings of the times, gained him high reputation with the American public. He also wrote several patriotic songs, which were universally popular. His connection with the army enabled him to form an acquaintance with many officers of distinction, and among them he had the satisfaction to rank the Commander-in-Chief. That great man honored him with flattering attentions. Mr. Dwight ever remembered his kindness with lively gratitude, and entertained for his character and services, military and civil, the highest respect and veneration.† His experience in this situation was by no means fruitless in reference to his subsequent life as a teacher. The examples of dignified manners with which he had been conversant among the officers of the army, especially in the person of Washington, contributed, no doubt, to the formation of his own manners and address, so much more courtly than usually belong to academic men or recluse scholars, and the wisdom and prudence which were so fully set before him in the councils of the Father of his Country, had their influence upon his own administration as President of Yale College. His pupils can not fail to remember how often he drew his illustrations and arguments from

* *Memoir.* † *Id.*

the observations he had made, and the experience he had gained, while serving as chaplain in the army.

The occasion of his leaving the army was one that subjected him to new and unexpected trials. His father was removed by death, while on a business tour in a distant part of the country, leaving a widow and thirteen children, of whom he was the eldest. On him devolved the interesting but self-denying duty of devoting himself to the aid of his mother, in supporting and educating his younger brothers and sisters, of whom he was constituted the guardian. On receiving intelligence of his father's death, he immediately removed to Northampton, where the family resided, and entered on the duties providentially assigned to him, with the greatest promptitude and cheerfulness. "In this situation (says his biographer,) he passed five years of the most interesting period of his life; performing in an exemplary manner the offices of a son and a brother, and of a guardian to the younger children. Here he was emphatically the staff and stay of the family. The government and education of the children, as well as the daily provision for their wants, depended almost exclusively on his exertions. The elder as well as the younger were committed to his care, and loved and obeyed him as a father. The filial affection and dutiful respect and obedience which he exhibited toward his mother, and the more than fraternal kindness with which he watched over the well-being of his brothers and sisters, deserve the most honorable remembrance. To accomplish the object, he postponed his own establishment for life, and a provision for his family. To accomplish it, though destitute of property, he relinquished in their favor his own proportion of the family estate, and labored constantly for five years, with a diligence and alacrity rarely exemplified. His mother ever acknowledged, in language of eloquent affection and gratitude, his kindness, faithfulness, and honorable generosity to her and to her children. The respect which she felt and manifested toward him, though perhaps not inferior in native powers of mind, resembled the affection of a dutiful child toward her father, rather than the feelings of a mother for her son. During this period he labored through the week upon the farm, and preached on the Sabbath to different vacant congregations in the neighboring towns. He also established a school at Northampton, for the instruction of youth of both sexes, which was almost immediately resorted to by such a number of pupils, that he was under the necessity of employing two assistants. At the same time, owing to the dispersed condition of the college at New Haven, during the war, and to his established character as an instructor, a part of one of the classes repaired to North-

ampton, and placed themselves under his instruction. To them he devoted his own immediate attention, until they had completed their regular course of collegiate studies." *

The load of domestic care he had sustained during this period, unusual for one so young, was not without its use in qualifying him for the post he was ultimately to occupy. While still within the precincts of youth, the care and education of brothers and sisters of different ages, some nearly as old as himself, was well suited to mature his character and ripen it into full manhood. He exhibited at once a beautiful example of filial piety and fraternal wisdom. Nor was the self-denial imposed on his ambition, and the necessity of relinquishing, or at least of postponing, all his flattering prospects of rising in the world, lost upon him as a means of moral discipline. At the age of thirty he had reached a dignity of deportment, and a maturity of wisdom, usually associated with advanced years and the largest experience. These five years spent in earnest efforts to alleviate a mother's cares, to form and mould the characters of such numbers who looked to him as a father, and the self-denial and laborious exertions, both bodily and mental, which he was compelled to exercise to provide the means of their support, formed together a miniature of those trials and responsibilities which he afterward sustained as President of Yale College.

Let us next attend him into *political* life, where he was gaining new and most important experience for the office of teacher. A strong disposition was manifested, from time to time, by the inhabitants of Northampton, to employ him in civil life. In the county conventions of Hampshire, he twice represented the town. Twice also he consented to serve the town as their representative in the state legislature. This was in the years 1781 and 1782, just before the close of the war of Independence, when the distresses and moral evils occasioned by a state of war imposed on the state governments most difficult and responsible duties. Inexperienced as he was in the business of a politician or a legislator, he at once became a leading member of the house, and was greatly distinguished and admired for his talents and eloquence. All his exertions were on the side of good order and good morals, and indicated a steady attachment to the principles of rational liberty, and decided hostility to licentiousness. A favorable opportunity was afforded him to serve the cause of education, which was ever near his heart. A petition for a grant in favor of Harvard College was before the legislature. At that time such grants were unpopular.* During his occasional absence from the

* Memoir.

house the petition had been called up ; and, after finding but few, and those not very warm advocates, had been generally negatived. On taking his seat, Mr. Dwight, learning what had occurred, moved a reconsideration of the vote. In a speech of about one hour in length, fraught with wit, with argument, and with eloquence, and received with marked applause on the spot, from the members and the spectators, he effectually changed the feelings of the house, and procured a nearly unanimous vote in favor of the grant. So marked was his success in this public career, that many citizens of distinction urged him to embark on the sea of political life, and a delegation of his native county earnestly requested him to become a candidate for election to the Continental Congress. He had made some progress in the study of law before he made choice of the clerical profession ; but, having solemnly dedicated himself to the ministry of the gospel, he could not be persuaded, by any prospects of civil promotion, to abandon the sacred calling.

In 1783, at the age of thirty-one years, he was settled over the church and congregation of Greenfield, a parish in the town of Fairfield, in Connecticut, where he continued the following twelve years.

It only remains, therefore, to view President Dwight as a *theologian* and a *parochial minister of the gospel*, in order to complete our survey of the training his course of life had involved for that peculiar office for which he was ultimately destined. When we reflect that the ministry of the gospel itself is only a more exalted kind of teaching, we can not doubt the preparation it affords for the highest exercise of that office. The study of the Bible is imbibing truth at its fountain, and nothing can be more appropriate to one whose mission afterward is to establish, upon the foundations of immutable truth, the characters of those who are to lead the councils of their country, or to influence the eternal destinies of their fellow-men. It was especially important for a teacher whose instructions, like his, lay to a great extent in the fields of theology and moral philosophy. Besides all this, the experience of the pastor of a people, fraught as it usually is with lessons of prudence, discretion, and the fruits of benevolent action, affords an excellent preparation for the office of President of a college. To President Dwight such a preparation was peculiarly appropriate, since he was called to fulfill the duties of chaplain and pastor, as well as of instructor and governor of the college. It is not the least of the advantages of the situation of the pastor of a people, as a preparation for the head of such an institution of learning, that it brings him into contact with every class of minds, and all shades of character, and thus makes him thoroughly acquainted with human

nature. Moreover, the life of a parish minister is itself a course of moral discipline well fitted to impart that prudence and self-control, which are important elements in the character of the instructor and governor of youth. But the actual exercise of the gift of teaching constituted, in connection with the pastoral office, an important part of the labors of Dr. Dwight, during the whole time that he resided at Greenfield. His native hospitality, the charms of his conversation, and his extensive acquaintance with men in professional and civil life, rendered his house a great resort of men of letters, of theologians, of eminent civilians, as well as of extensive family connections. Such an amount of company of course added greatly to the ordinary expenses of supporting a family, and both combined went far beyond the scanty salary of a parish minister. Hence, necessity conspired with his natural fondness for teaching, to induce him to open a school of the higher order, for the instruction of youth of both sexes. He erected, therefore, a small school-house on a commanding and beautiful site, overlooking the waters of Long Island Sound, for a long distance, and the bright villages on its margin,—a situation embracing scenery hardly surpassed in beauty by any in New England. This seminary he taught in person, devoting to it regularly six hours every day. In a short time, youths in great numbers, and of both sexes, not only from various parts of New England, but from the middle and southern states, as well as from abroad, resorted to his school. It was commenced and carried on absolutely without funds, and depended solely on his own character and exertions. He supported it, during his whole residence at Greenfield, with unexampled reputation. The entire number of pupils instructed here, within the period of twelve years, exceeded one thousand. Many of them were carried through the whole course of education customary at college. In my youth I was well acquainted with men of high intelligence and distinguished literary attainments, whose sole education had been acquired in the school at Greenfield Hill. This seminary also afforded, it is believed, the earliest example in our country, where females were instructed in the higher branches of academic learning. It is justly added by the biographer of President Dwight, that probably to the exertions and influence of no one individual are the ladies of our country so extensively indebted,—that no man thought more highly of the sex, no man loved better the company of women of refinement and intelligence, and no man did more to exalt the female character. In the class debates of the old question, on the relative ability of the sexes, the President always warmly insisted on the full equality of the female sex.

What a picture do the labors of Dr. Dwight, at Groenfield Hill, afford of the productiveness of learned industry ! It was here that he digested his great System of Theology, and preached it twice in a series of sermons to his people, performing for them at the same time, with the greatest faithfulness, all his parochial duties. It was here that he composed the beautiful and instructive poem of "Greenfield Hill," chiefly as a pastime during his walks between his house and his school room. Six hours a day, also, were given to the fatiguing and exhausting labors of teaching different classes of pupils, in a great range and variety of studies. He cultivated, with his own hands, a large culinary, fruit, and flower garden ; and he devoted a great amount of time, with the most unwearied hospitality, to the crowds of visitors that continually thronged his house. Prodigious as were the labors which we have already enumerated, yet it is but a partial list of all that he accomplished during this fruitful period of his life.

From the preceding sketch it is evident that the whole course of life of Dr. Dwight, from infancy to middle life, when he entered the Presidency of Yale College, was a continual training for that elevated station to which, on the death of President Stiles, he was transferred, in 1795. Those noble maternal influences which were shed upon his infant mind, like the dew of morning upon the opening flower ; the habitual cultivation of all his faculties, of intellect and imagination, which formed the well-balanced mind ; a heart fraught with every noble and exalted purpose, and deeply imbued with the faith and benevolence of the gospel, and the moral discipline he had received, as well as the valuable experience he had gained in the onerous duties he had discharged in his filial and fraternal relations ; the life of chaplain in the army ; the part he bore in public affairs, as a member of the legislature ; the experience of a parish minister ; the actual exercise of the gifts of teaching through every stage of life ; and, finally, his multifarious learning, and boundless stores of knowledge : these all conspired to form an amount of preparation for the instruction and government of youth, and for superintending the various interests of a University, such as has seldom been brought to the same elevated station. A brief review of President Dwight's *method of teaching* will bring these remarks to a close.

Dr. Dwight, on his entering the Presidency, is said to have relaxed much from the ancient rigid forms of intercourse between the faculty and the students, where dignity was graduated by standard measures. In the old college laws it was enacted, among many other similar provisions for securing the respect of the students toward their officers,

that *no freshman should wear his hat within ten rods of the President, eight rods of a Professor, and six rods of a Tutor.* Yet his bearing was more stately than is common at the present day, and his courtesy, in returning the salutations of the students, had more the air of condescension than a reciprocation of kind and respectful feelings. With the senior class, who, in a body, exclusively fell under his immediate instruction, he was somewhat less distant, but even one of them could hardly feel at ease in his presence. Not that the preceptor was haughty, but the pupil was overawed. They met him daily in his lecture room, at eleven o'clock. When he entered the room, the most respectful silence was observed, and all remained standing until he was seated. There was much, both in his person and in the associations connected with him, to inspire them with profound respect. They saw before them, not a pedagogue, or a learned recluse, ignorant of the world and of human nature, but a man who had attained high celebrity even in his youth; the first of American divines; a compatriot of the heroes of the revolution; one who, by universal consent, held the first rank for splendor of talents and extent of erudition; an instructor whose pupils were numbered by thousands, many of them occupying the highest posts of honor and usefulness in the church and state. He appeared before them, too, in all the dignity of unsullied virtue, and armed with the panoply of a minister of Christ. His person was also large and commanding, his manners refined and courtly, his voice deep and melodious;—authority, as one born to command, seemed to invest his entire character.

The books recited to the President were Blair's Rhetoric, Locke on the Human Understanding, and Paley's Moral Philosophy. Every Wednesday and Saturday, a division of the class, consisting of eight or ten, read disputations on some question previously selected and approved by the President, on which, at the close of the discussion, he gave an elaborate decision. On Monday morning, in the place of a recitation, he gave a familiar discourse, founded on Vincent's Catechism, on the doctrines, duties, and evidences of Christianity. But the great value of senior year consisted not so much in the lessons learned and recited, as in the vast amount of instruction which fell from the lips of the instructor. It has with some reason been alledged, as a defect in his method of instruction, that the student was not laid under sufficient responsibility. Leading questions were asked, which only required to be affirmed or denied, and hence it was possible to pass both the daily recitations and the public examinations with but little study. Senior year was, therefore, just what each individual chose

to make of it. Those desirous of improving their time well, found it a most profitable year. They found their sum of knowledge daily increased; their moral principles formed and strengthened; from boys they became men, and rose to the full consciousness of manhood, and had their principles, literary, political, moral, and religious, settled for life. The majority carried in note-books, and recorded as many as possible of the President's remarks. Although the class met him but once a day, yet the interview was frequently prolonged from an hour and a half to two hours, and, on dispute days, occasionally still longer. Copious and able as were the instructions given by President Dwight, in connection with the text-books, it was in the ample and profound discussions of questions, whether philosophical, political, literary, or religious, that his great powers and resources as a teacher were most fully brought out. In these, according to the nature of the subject, appeared, by turns, the divine, the poet, the statesman, the patriot, the philanthropist. It was often evident that he came to the lecture room to attend these debates without any special preparation. Indeed, when, on account of the length of time occupied by the disputants, his decision was postponed, to be given at the close of the next recitation, he would sometimes require to be reminded of the question. But, after a moment's reflection, apparently throwing his ideas under numerical heads, he would enter with all his soul into the discussion, bringing forward in luminous order the most convincing arguments, embellishing by rhetorical figures, illustrating by pertinent anecdotes, enlivening by sallies of humor, and often warming up into a more glowing strain of eloquence than he ever exemplified in his public discourses. During the reading of the debates of the students, he often interspersed remarks suggested by some casual association, which led him at a distance from the main point in argument. But it was useful information, however discursive he might sometimes appear; and, by this practice, he touched upon so many of the exigencies of real life, that his pupils have been often heard to say, that hardly a day of their subsequent lives has passed without their recalling something said by President Dwight. The earnestness with which he engaged in the business of instruction, and in arguing questions in which important truths were to be established, never abated. It might be the twentieth or the thirtieth class of pupils now before him, and he might be reiterating the same ground for the thirtieth time, yet his zeal knew no satiety. Nothing could have so fully sustained his interest in these exercises, but a high appreciation of the value of the truths he taught, and a benevolent desire that his pupils should share with him so rich a treasure. The intensity of feeling

with which he engaged in the defense of the truth, when it was assailed or endangered, was strikingly evinced on an occasion when I was present. During his last sickness, a small class of students in theology recited to him once a week, and came to his house for that purpose only a week before he died. When they entered the room, the President was leaning back in his chair, with his head upon the wall, and with many indications of intense suffering.* It was one of his bad days, and Mrs. Dwight went to him and told him that the young men had come to recite, but besought him not to attempt to hear them. One of them was to read a dissertation on the doctrine of the Trinity. The President faintly replied that it would not hurt him to have the paper read, although he should probably not be able to make any remarks. The student began to read, and soon touched upon delicate points in the controversy then waging on this great subject. The face, before so pale and wan, began to brighten up; he leaned forward in his chair, took up several points in the argument, in opposition to the views of the writer, and, at length, altogether forgetting his bodily pain and weakness, entered fully into the question, and discoursed for an hour with his accustomed zeal and energy.

It was a melancholy satisfaction I enjoyed on the day after the decease of this venerated man, to watch over his lifeless remains. My mind was filled to overflowing with recollections of all I had seen and heard of the extraordinary personage whose form, majestic even in death, now lay before me. Retiring from the solemn chamber, I took my pen and wrote as follows: "Where among all the records of the many great and good, who have devoted themselves to the same dignified employment, can a man be found, who united in his own person a more wonderful assemblage of those qualities which fit one for forming the characters of youth? Who has ever united, in a higher degree, the dignity that commands respect, the accuracy that inspires confidence, the ardor that kindles animation, the kindness that wins affection, and has been able, at the same time, to exhibit before his pupils the fruits of long and profound research, of an extensive and profitable intercourse with the world, and of great experience in the business of instruction?"† After the lapse of forty years, and after much opportunity with many eminent instructors, this estimate seems to me entirely just, and President Dwight is ever present to my mind as the GREAT MODEL TEACHER.

* His disorder was an internal cancer, and his anguish extreme.

† This passage formed a part of a Memoir of Dr. Dwight, published in the "*Philadelphia Port-Folio*" for November, 1817.

XVI. CALVIN ELLIS STOWE.

CALVIN ELLIS STOWE, whose labors in behalf of common schools and teachers' seminaries, in addition to the constant and pressing demands on his time by professional duties in college and theological schools, entitle him to an honorable place in the history of American Education, was born at Natick, Mass., April 6th, 1802.

His ancestors came from London to Massachusetts, in 1634, and settled in Roxbury. On the records of Roxbury church are still to be seen, in the hand-writing of the Apostle Eliot, the following entries:—

"John Stowe. He arrived at N. E. the 7th of the 3d month, anno 1634. He brought his wife and 6 children; Thomas, Elizabeth, John, Nathaniel, Samuel, Thankful."

"Elizabeth Stowe, the wife of John Stowe. She was a very godly matron, a blessing, not only to her family, but to all the church. When she had led a christian conversation a few years among us, she died and left a good savor behind her."

The descendants of this worthy couple have, from the beginning, belonged to the class of industrious, frugal, God-fearing yeomanry, the bone and muscle of New England society.

His father, a farmer, died in July, 1808, leaving the family destitute. His mother, a woman of energy and judgment, managed, with difficulty, to maintain herself and her children. Calvin attended a good district school, taught for a portion of the year by a student of Harvard College, and had access to a parish and social library, of which privileges he made good use.

At twelve years of age, he was apprenticed to a paper-maker, where he remained for four years. At the end of that time, having managed to get together a little money, with that almost desperate resolution to gain an education which has characterized so many poor New England boys, he spent it in paying his expenses during two years' study at Bradford Academy.

Two years afterward, in November, 1820, some members of Dr. Payson's church, in Portland, Me., having furnished the means, he entered Gorham Academy, to fit for college; and, after remaining there ten months, entered Bowdoin College, in September, 1821, under the same patronage.



Wm. S. Loomis

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Cambridge, Mass.: Cambridge University Press, 1983.

[illegible]

1. $\mathcal{A} = \{A_1, \dots, A_n\}$ is a family of n sets, $n \geq 1$, each of which is a subset of N .
 2. $\mathcal{A}$ is a σ -algebra, i.e., it is closed under countable unions and complements.
 3. $\mathcal{A}$ contains the empty set $\emptyset$ and the universal set N .

It is not surprising that the *Stig* was a very good performer in the tests. It is clearly the most suitable for the conditions of the tests, and the most suitable for the conditions of the tests, and the most suitable for the conditions of the tests.

These results suggest that the effect of the 1996 law on the number of abortions is not uniform across the country. The effect is positive in the states with a high abortion rate in 1994, but negative in the states with a low abortion rate in 1994. This is not surprising, since the law was intended to reduce the number of abortions in the states with a high abortion rate. The results also suggest that the effect of the law is not uniform across the population. The effect is positive for the population with a high abortion rate in 1994, but negative for the population with a low abortion rate in 1994. This is not surprising, since the law was intended to reduce the number of abortions in the population with a high abortion rate.

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1. The first step is to identify the problem. This involves understanding the current situation and what needs to be changed.

[illegible]

There was a lot of controversy about whether or not some of the best of the songs, including "Portland Morning" and "The New England City of Dreadful Night," should be included in the collection. Bowlin felt that the songs were too good to leave out, and he decided to include them. He also included "Bowlin's Blues" and "Sawtooth Mountain."

He graduated, in due course, September, 1824, with the first honors of his class; and remained at college one year, as librarian and tutor. Entering Andover Theological Seminary, in 1825, he graduated in 1828, and remained two years longer, being employed as assistant in Professor Stuart's department, and editing, during part of the time, the *Boston Recorder*, the oldest religious newspaper in the United States.

In October of 1830, Professor Stowe commenced his long career as a collegiate instructor, being then inaugurated Professor of Languages at Dartmouth College. While here, in 1832, he married Elizabeth, daughter of Rev. Dr. Tyler. She died in August, 1834, leaving no children.

Professor Stowe's reputation for learning and ability already stood high; and, when Dr. Lyman Beecher was invited to the presidency of Lane Theological Seminary, Professor Stowe was offered, and accepted, the Professorship of Biblical Literature in the new Seminary, in 1833. The financial disasters of 1837, as is well known, severely crippled the resources of the seminary, and during some years its officers received little or nothing on account of salaries. They however clung to their posts, although without private resources, and, by resolute though distressing self-sacrifice, maintained the operations of the institution until better times returned, and their scanty incomes were partially restored.

While in this institution, Professor Stowe became convinced that advanced professional schools were out of place, and hopelessly inutile, in a community such as that of the West of that day; and seeing that it was common schools that were wanted, and quickly recognizing the importance of those operations for their improvement, in which Nathan Guilford, Samuel Lewis, Dr. Drake, Dr. Aydelotte, Dr. McGuffey, and their companions, were pioneers, he at once took cordial and strong hold with them; advising and consulting, speaking and writing, wherever occasion served. Professor Stowe was not ambitious of prominence or office, and was well satisfied to act the quieter and more useful part of a private adviser and laborer.

In January, 1836, Professor Stowe married Harriet E., daughter of Rev. Dr. Lyman Beecher. In May of the same year, he departed for Europe, his primary errand being to select a library for Lane Seminary. Some friends of education, knowing of this journey, took such measures that the legislature gave him an official appointment as agent to examine European schools, and especially those of Prussia, and voted a small sum in payment of expenses. He returned in 1837, having been very successful in accomplishing both

these offices ; and drew up and presented his celebrated "*Report on Elementary Education in Europe.*"

The Legislature of Ohio distributed this Report to every school district in the state, and it was republished and extensively circulated by the legislatures of Pennsylvania, Michigan, Massachusetts, North Carolina, Virginia, and elsewhere. Its influence was every where favorable, and strongly marked ; and not a little of the advancement in common schools, during the last twenty years, may be traced to that report. The exposition given of the thoroughness, completeness, and comprehensiveness of the system of primary public instruction in Prussia and Wirtemberg, commanded the admiration of educators and statesmen, and stimulated both to the establishment of institutions, organized and conducted with special reference to communicating a knowledge of the science and art of education. Professor Stowe thus sums up the character of the system in reference to the particular wants of Ohio.

"The striking features of this system, even in the hasty and imperfect sketch which my limits allow me to give, are obvious even to superficial observation. No one can fail to observe its great completeness, both as to the number and kind of subjects embraced in it, and as to its adaptedness to develop every power of every kind, and give it a useful direction. What topic, in all that is necessary for a sound business education, is here omitted ? I can think of nothing, unless it be one or two of the modern languages, and these are introduced wherever it is necessary. I have not taken the course precisely as it exists in any one school, but have combined, from an investigation of many institutions, the features which I suppose would most fairly represent the whole system. In the Rhenish provinces of Prussia, in a considerable part of Bavaria, Baden, and Wirtemberg, French is taught as well as German ; and in the schools of Prussian Poland, German and Polish are taught. Two languages can be taught in a school quite as easily as one, provided the teacher be perfectly familiar with both, as any one may see by visiting Mr. Solomon's school in Cincinnati, where all the instruction is given both in German and English.

What faculty of mind is there that is not developed in the scheme of instruction sketched above ? I know of none. The perceptive and reflective faculties, the memory and the judgment, the imagination and the taste, the moral and religious faculty, and even the various kinds of physical and manual dexterity, all have opportunity for development and exercise. Indeed, I think the system, in its great outlines, as nearly complete as human ingenuity and skill can make it ; though undoubtedly some of its arrangements and details admit of improvement ; and some changes will of course be necessary in adapting it to the circumstances of different countries.

The entirely practical character of the system is obvious throughout. It views every subject on the practical side, and in reference to its adaptedness to use. The dry, technical, abstract parts of science are not those first presented ; but the system proceeds, in the only way which nature ever pointed out, from practice to theory, from facts to demonstrations. It has often been a complaint in respect to some systems of education, that the more a man studied, the less he knew of the actual business of life. Such a complaint cannot be made in reference to this system, for, being intended to educate for the actual business of life, this object is never for a moment lost sight of.

Another striking feature of the system is its moral and religious character. Its morality is pure and elevated, its religion entirely removed from the narrowness of sectarian bigotry. What parent is there, loving his children, and wishing to have them respected and happy, who would not desire that they should be

educated under such a kind of moral and religious influence as has been described. Whether a believer in revelation or not, does he not know that without sound morals there can be no happiness, and that there is no morality like the morality of the New Testament? Does he not know that without religion the human heart can never be at rest, and that there is no religion like the religion of the Bible? Every well-informed man knows that, as a general fact, it is impossible to impress the obligations of morality with any efficiency on the heart of a child, or even on that of an adult, without an appeal to some code which is sustained by the authority of God; and for what code will it be possible to claim this authority, if not for the code of the Bible?

But perhaps some will be ready to say, 'The scheme is indeed an excellent one, provided only it were practicable; but the idea of introducing so extensive and complete a course of study into our common schools is entirely visionary, and can never be realized.' I answer, that it is no theory which I have been exhibiting, but a matter of fact, a copy of actual practice. The above system is no visionary scheme, emanating from the closet of a recluse, but a sketch of the course of instruction now actually pursued by thousands of schoolmasters, in the best district schools that have ever been organized. It can be done; for it has been done—it is now done; and it ought to be done. If it can be done in Europe, I believe it can be done in the United States: if it can be done in Prussia, I know it can be done in Ohio. The people have but to say the word and provide the means, and the thing is accomplished; for the word of the people here is even more powerful than the word of the king there; and the means of the people here are altogether more abundant for such an object than the means of the sovereign there. Shall this object, then, so desirable in itself, so entirely practicable, so easily within our reach, fail of accomplishment? For the honor and welfare of our state, for the safety of our whole nation, I trust it will not fail; but that we shall soon witness, in this commonwealth, the introduction of a system of common-school instruction, fully adequate to all the wants of our population.

But the question occurs, *How* can this be done? I will give a few brief hints as to some things which I suppose to be essential to the attainment of so desirable an end.

1. Teachers must be skillful, and trained to their business. It will at once be perceived, that the plan above sketched out proceeds on the supposition that the teacher has fully and distinctly in his mind the whole course of instruction, not only as it respects the matters to be taught, but also as to all the best modes of teaching, that he may be able readily and decidedly to vary his method according to the peculiarities of each individual mind which may come under his care. This is the only true secret of successful teaching. The old mechanical method, in which the teacher relies entirely on his text-book, and drags every mind along through the same dull routine of creeping recitation, is utterly insufficient to meet the wants of our people. It may do in Asiatic Turkey, where the whole object of the school is to learn to pronounce the words of the Koran in one dull, monotonous series of sounds; or it may do in China, where men must never speak or think out of the old beaten track of Chinese imbecility; but it will never do in the United States, where the object of education ought to be to make immediately available, for the highest and best purposes, every particle of real talent that exists in the nation. To effect such a purpose, the teacher must possess a strong and independent mind, well disciplined, and well stored with every thing pertaining to his profession, and ready to adapt his instructions to every degree of intellectual capacity, and every kind of acquired habit. But how can we expect to find such teachers, unless they are trained to their business? A very few of extraordinary powers may occur, as we sometimes find able mechanics, and great mathematicians, who had no early training in their favorite pursuits; but these few exceptions to a general rule will never multiply fast enough to supply our schools with able teachers. The management of the human mind, particularly youthful mind, is the most delicate task ever committed to the hand of man; and shall it be left to mere instinct, or shall our schoolmasters have at least as careful a training as our lawyers and physicians?

2. Teachers, then, must have the means of acquiring the necessary qualifications; in other words, there must be institutions in which the business of teaching

is made a systematic object of attention. I am not an advocate for multiplying our institutions. We already have more in number than we support, and it would be wise to give power and efficiency to those we now possess before we project new ones. But the science and art of teaching ought to be a regular branch of study in some of our academies and high schools, that those who are looking forward to this profession may have an opportunity of studying its principles. In addition to this, in our populous towns, where there is opportunity for it, there should be large model schools, under the care of the most able and experienced teachers that can be obtained; and the candidates for the profession who have already completed the theoretic course of the academy, should be employed in this school as monitors, or assistants—thus testing all their theories by practice, and acquiring skill and dexterity under the guidance of their head master. Thus, while learning, they would be teaching, and no time or effort would be lost. To give efficiency to the whole system, to present a general standard and a prominent point of union, there should be at least one model teachers' seminary, at some central point—as at Columbus—which shall be amply provided with all the means of study and instruction, and have connected with it schools of every grade, for the practice of the students, under the immediate superintendence of their teachers.

3. The teachers must be competently supported, and devoted to their business. Few men attain any great degree of excellence in a profession unless they love it, and place all their hopes in life upon it. A man cannot, consistently with his duty to himself, engage in a business which does not afford him a competent support, unless he has other means of living, which is not the case with many who engage in teaching. In this country especially, where there are such vast fields of profitable employment open to every enterprising man, it is not possible that the best of teachers can be obtained, to any considerable extent, for our district schools, at the present rate of wages. We have already seen what encouragement is held out to teachers in Russia, Prussia, and other European nations, and what pledges are given of competent support to their families, not only while engaged in the work, but when, having been worn out in the public service, they are no longer able to labor. In those countries, where every profession and walk of life is crowded, and where one of the most common and oppressive evils is want of employment, men of high talents and qualifications are often glad to become teachers even of district schools; men who in this country would aspire to the highest places in our colleges, or even our halls of legislation and courts of justice. How much more necessary, then, here, that the profession of teaching should afford a competent support!

Indeed, such is the state of things in this country, that we cannot expect to find male teachers for all our schools. The business of educating, especially young children, must fall, to a great extent, on female teachers. There is not the same variety of tempting employment for females as for men; they can be supported cheaper, and the Creator has given them peculiar qualifications for the education of the young. Females, then, ought to be employed extensively in all our elementary schools, and they should be encouraged and aided in obtaining the qualifications necessary for this work. There is no country in the world where woman holds so high a rank, or exerts so great an influence, as here; wherefore, her responsibilities are the greater, and she is under obligations to render herself the more actively useful.

4. The children must be made comfortable in their school; they must be punctual, and attend the whole course. There can be no profitable study without personal comfort; and the inconvenience and miserable arrangements of some of our school-houses are enough to annihilate all that can be done by the best of teachers. No instructor can teach unless the pupils are present to be taught, and no plan of systematic instruction can be carried steadily through unless the pupils attend punctually and through the whole course.

5. The children must be given up implicitly to the discipline of the school. Nothing can be done unless the teacher has the entire control of his pupils in school-hours, and out of school too, so far as the rules of the school are concerned. If the parent in any way interferes with, or overrules, the arrangements of the teacher, he may attribute it to himself if the school is not successful. No teacher ever ought to be employed to whom the entire management of the children can-

not be safely intrusted ; and better at any time dismiss the teacher than counteract his discipline. Let parents but take the pains and spend the money necessary to provide a comfortable school-house and a competent teacher for their children, and they never need apprehend that the discipline of the school will be unreasonably severe. No inconsiderable part of the corporal punishment that has been inflicted in schools, has been made necessary by the discomfort of school-houses and the unskillfulness of teachers. A lively, sensitive boy is stuck upon a bench full of knot-holes and sharp ridges, without a support for his feet or his back, with a scorching fire on one side of him and a freezing wind on the other ; and a stiff Orbilius of a master, with wooden brains and iron hands, orders him to sit perfectly still, with nothing to employ his mind or his body, till it is *his turn to read*. Thus confined for hours, what can the poor little fellow do but begin to wriggle like a fish out of water, or an eel in a frying-pan ! For this irrepressible effort at relief he receives a box on the ear ; this provokes and renders him still more uneasy, and next comes the merciless ferule ; and the poor child is finally burnt and frozen, cuffed and beaten, into hardened roguery or incurable stupidity, just because the avarice of his parents denied him a comfortable school-house and a competent teacher.

6. A beginning must be made at certain points, and the advance toward completeness must be gradual. Every thing cannot be done at once, and such a system as is needed cannot be generally introduced till its benefits are first demonstrated by actual experiment. Certain great points, then, where the people are ready to co-operate, and to make the most liberal advances, in proportion to their means, to maintain the schools, should be selected, and no pains or expense spared, till the full benefits of the best system are realized ; and as the good effects are seen, other places will very readily follow the example. All experience has shown that governmental patronage is most profitably employed, not to do the entire work, but simply as an incitement to the people to help themselves.

To follow up this great object, the Legislature has wisely made choice of a Superintendent, whose untiring labors and disinterested zeal are worthy of all praise. But no great plan can be carried through in a single year ; and if the Superintendent is to have opportunity to do what is necessary, and to preserve that independence and energy of official character which are requisite to the successful discharge of his duties, he should hold his office for the same term, and on the same conditions, as the Judges of the Supreme Court.

Every officer engaged in this, or in any other public work, should receive a suitable compensation for his services. This, justice requires ; and it is the only way to secure fidelity and efficiency.

There is one class of our population for whom some special provision seems necessary. The children of foreign emigrants are now very numerous among us, and it is essential that they receive a good ENGLISH EDUCATION. But they are not prepared to avail themselves of the advantages of our common English schools, their imperfect acquaintance with the language being an insuperable bar to their entering on the course of study. It is necessary, therefore, that there be some preparatory schools, in which instruction shall be communicated both in English and their native tongue. The English is, and must be, the language of this country, and the highest interests of our state demand it of the Legislature to require that the English language be thoroughly taught in every school which they patronize. Still, the exigencies of the case make it necessary that there should be some schools expressly fitted to the condition of our foreign emigrants, to introduce them to a knowledge of our language and institutions. A school of this kind has, been established in Cincinnati, by benevolent individuals. It has been in operation about a year, and already nearly three hundred children have received its advantages. Mr. Solomon, the head teacher, was educated for his profession in one of the best institutions of Prussia, and in this school he has demonstrated the excellences of the system. The instructions are all given both in German and English, and this use of two languages does not at all interrupt the progress of the children in their respective studies. I cannot but recommend this philanthropic institution to the notice and patronage of the Legislature.*

In neighborhoods where there is a mixed population, it is desirable, if possible,

* German schools now form a part of the system of public schools in Cincinnati.

to employ teachers who understand both languages, and that the exercises of the school be conducted in both, with the rule, however, that all the reviews and examinations be in *English only*."

Professor Stowe took an active part in the proceedings of the Western College of Teachers. In 1835, he submitted a report on the "*Education of Immigrants*," by a liberal system of public schools, in which native and foreign-born children could be educated together, and thus assimilated into the citizens of a common country. In 1837, he read his report on the "*Course of Instruction in the Public Primary Schools of Prussia*." In 1838, he read a lecture on "*The Bible as a Means of Moral and Intellectual Improvement*," and, in the following year, a paper on "*Teachers' Seminaries*," which was published in the same year in the "*Biblical Repository*," and afterward in a volume with his "*Report on Elementary Instruction in Prussia*." His paper on Teachers' Seminaries had a good influence in the enlightenment of public opinion on that subject. When the Normal Schools of Massachusetts were first established, and afterward when a vacancy in the mastership of one these schools occurred, his services were earnestly sought as principal. In 1844, he delivered a lecture before the American Institute of Instruction, on the "*Religious Element in Education*," which was widely circulated and read.

On his return from Europe, Professor Stowe continued his labors at Lane Seminary, until 1850, when, his health being quite broken down by labor and by the climate of Cincinnati, he accepted an appointment as Divinity Professor at Bowdoin College. In 1852, being offered the chair of Sacred Literature at Andover Theological Seminary, he accepted, and still retains the place, in which he is yet hard at work for the good causes which have so long interested him, of theological learning, common schools, temperance, and liberty.

Aside from Professor Stowe's title to a place in this Journal, as an efficient and persevering laborer for common education, he occupies a high place as an instructor in his chosen department, and a man of profound, extensive, and accurate learning, and judicious, original, and independent views in that department. Ill health has not prevented his doing a very great amount of work, both in his own private studies and in lecturing. His faithful thoroughness as a student and teacher, is illustrated by his custom of studying his course anew as he takes each successive class over it, precisely as if he had never been over it before; a method, we may observe in passing, which well remunerates both the teacher and taught, by the freshness of the subject to the former, and the vigor and point of his instructions to the latter.

XVIII. SUGGESTIONS ON THE EDUCATION OF GIRLS.

BY VARIOUS AUTHORS.

IN addition to elaborate articles, new and old, on the subject of *Female Education*, we propose to bring together, in successive numbers, the best suggestions we have taken note of in our reading, by different authors in different ages and countries, as to the instruction and practical training of girls.

ST. JEROME.

JEROME—or Eusebius Hieronymus Sophronius—and better known from his canonical title as *St. Jerome*, was born of Christian parents, at Stridon, a town in Pannonia, on the confines of Italy, about the year 381. Gifted with fine natural powers, he enjoyed and improved all the opportunities of learning which the best schools and the most erudite teachers in Rome and Gaul could afford, and to the acquisitions from books and living teachers, he added the fruits of the widest travel, and of profound meditation for years in the solitudes of the East. He wrote on almost every subject—defending the doctrines of the church as held at Rome, preaching religious abstinence and mortification, and obtaining a remarkable influence over the women of his time. Under his eloquent exhortations, many of the wealthy and noble ladies of Rome devoted themselves to perpetual chastity, distributed their possessions among the poor, and spent their time in attendance on the sick. Among these converts was Paula, a descendant of the Scipios and the Gracchi, who, on the death of her husband, having provided for her family, visited the holy places of the East and finally established herself at Bethlehem—building three monasteries for devout women, all under one rule, and a house for St. Jerome and his brethren. Her son, Toxotius, married *Leta*, a daughter of a Pagan priest, who became a convert under Jerome's preaching. For the education of their daughter, St. Jerome wrote a letter, which has been the highest authority in regard to female training with devout Catholics ever since. This daughter resided for a time with her grandmother at Bethlehem, and succeeded her in the government of the monasteries which St. Paula founded. St. Jerome is best known to the general scholar for his translation and edition of the Scriptures, styled the "*Latin Vulgate*," and for his "*Catalogue of Ecclesiastical History*." Incidents in his life and representations of his character are favorite subjects in pictures, prints, and sculpture. The "*Last Communion of St. Jerome*," by Domenichino, in the Vatican at Rome, is one of the most celebrated pictures of the world.

No. 14.—[Vol. V., No. 2.—38.]

LETTER* OF ST. JEROME TO LÆTA, ON THE EDUCATION OF HER DAUGHTER.

Of this kind must be the education of a soul which is intended for a temple of the Holy Ghost:—Let her not learn to hear or say any thing but what savors of the fear of God. Impure language let her not understand, or know any thing of worldly songs; while her tongue is yet tender, let its acquaintance be only with sweet psalms. Keep her away from the wantonness of youth; nay, let even her maidens and attendants be debarred all secular connections, lest what they have learnt amiss they should teach worse. Let her have letters made of box and ivory, and learn to call them by their proper names; these will amuse her, and thus amusement will become instruction. And let her not only know the letters in their order, so as to repeat their names by rote, but change the order frequently, mixing the middle with the first, and the last with the middle, till she can recognize them by sight as well as sound. But when her trembling hand begins to hold a pen, let its tender joints be guided by the hand of another, placed over hers; or else let the letters be engraved upon a tablet, so that she may trace out their forms without wandering from the lines of the engraving. Induce her to put syllables together by rewards, and encourage her with such little gifts as please the mind of infancy. Give her also companions in her lessons, to excite her emulation, and even sting her by the praises they receive. Do not find fault with her, if she is slow; but call out her powers by commendation, making her feel pleasure in excelling, and pain in being excelled. Above all things, take care that she does not get disgusted with her studies; lest any prejudice against them, contracted in her infancy, should extend beyond it. Let the very names by which she learns to make up letters into words be not taken at random, but selected and brought together with a view to some good purpose; the names, for instance, of prophets and apostles, with the whole line of patriarchs, from Adam downward, according to St. Matthew and St. Luke; thus, while otherwise engaged, her memory will be preparing for its future duties. Then you must look out for a tutor of approved age, and character, and learning; nor will a man of learning blush to do that for a relation, or for any noble virgin, which Aristotle did for the son of Philip, for whose sake that philosopher condescended to the office of a clerk, and instructed him in the first rudiments of knowledge. Small things must not be despised, when great things can not come to pass without them. The letters themselves, and the first rules of education, sound very differently from the mouth of the rustic and the learned. You must take care, therefore, that the silly affectation of women does not give her a habit of pronouncing her words imperfectly; and that she does not idly amuse herself in dress and jewels,—of which things, one is fatal to the morals, the other to the elocution: do not let her learn in infancy what she will have to unlearn afterward. The Gracchi are said to have been not a little indebted for their eloquence to their mother's conversation. The style of Hortensius was formed in his father's bosom. It is a hard thing to get rid of that which the untutored mind has first imbibed. Who can restore the wool of purple dye to its native whiteness? The vessel long retains the taste and smell with which it has been fresh imbued. Greek history tells us that Alexander, the most powerful of kings, the conqueror of the world, never could throw off the defects in manner and gait which he had contracted in his infancy from his instructor, Leonides. For we are all disposed to imitate the bad; and we can soon copy a man's vices, though we can not reach unto his virtues. Take care, therefore, that her nurse is not

* St. Jerome's Works, Vol. I., fo. 26. Edition of Erasmus. Basil, 1516. We have omitted a few introductory paragraphs of St. Jerome's Letter to Læta as irrelevant to the main subject.

drunken, or wanton, or fond of talking; but let her have a modest woman to carry her, and one of becoming gravity to nurse her. Above all, let the infant soldier know the Captain, and the army, for whose service she is trained. Let her long for them, and threaten to go over to them. Let even her dress and apparel remind her for whom she is intended. Do not pierce her ears for ear-rings, or defile with artificial colors the beauty that is consecrated unto Christ. Load not her neck with gold and pearls, nor burden her head with jewels, nor give her hair a flaming dye,—too true an omen of the flames of hell. Let her pearls be of a different kind from such as she may sell and buy, “the pearl of great price.”

Eli, the high-priest, offended God by the vices of his sons. A man can not be a bishop, if he has profligate and disobedient children. On the other hand, we are told that “a woman shall be saved in child-bearing, if they continue in faith, and charity, and holiness, with sobriety.” If the virtues of those who are of mature age and independent will are imputed to the parents, how much more of those who are but babes and sucklings, and do not know their right hand from their left,—the difference, that is, between good and evil! If you are so anxious that your daughter should avoid a viper’s sting, why are you not equally careful that she be not stricken by “the hammer of the whole earth;” that she drink not of the golden cup of Babylon; that she go not forth with Dinah, or wish to see the daughters of a strange land; that her feet grow not wanton, or her garments trail behind her? Poisons are never given, unless the cup is smeared with honey; and vices can not deceive, except under the shade of virtues. How, then, you will say, are the sins of the fathers not imputed to the children, and of the children to the fathers, but “the soul which sinneth, it shall die?” This is spoken of those whose years admit of wisdom, of whom it is written in the gospel, “He is of age, let him speak for himself.” But so long as he is a child, and thinks as a child, till he has arrived at years of discretion, and the point where good and evil, like the Pythagorean letter,* become divergent—up to that time his actions, good or evil, are imputed to his parents. Unless, indeed, you suppose that the sons of Christians, if they continue unbaptized, bear all the guilt of sin themselves, and that none of it falls on the head of those who refuse to bestow that sacrament upon them, especially at a time when its recipients could not reject it; just as, on the other hand, the salvation of the infant is a gain unto the parents. It was in your own power to offer your daughter or not (though here your condition is peculiar, inasmuch as you had vowed her to God’s service before she was conceived;) but now she is offered, you can only neglect her at your own peril. He who offers a victim lame or mutilated, or blemished in any other way, is guilty of sacrilege; how much heavier the punishment of him who offers a part of his own body, and the purity of an untainted soul, to the acceptance of his King, if he is careless in preserving that which he has so disposed!

When she is growing up, and beginning, like her Bridegroom, to increase in wisdom, and stature, and favor with God and man, let her go with her parents to the temple of her heavenly Father; but let her not depart from the temple. Let them seek her in the journeys of the world, among her kinsfolk and acquaintance, and find her nowhere but in the sanctuary of the Scriptures, asking questions of prophets and apostles about the spiritual marriage of the soul with Christ. Let her imitate Mary, whom the angel Gabriel found alone in her chamber; and therefore, perhaps, she was alarmed, because she beheld the form of a man to whom she was a stranger. Let her imitate her of whom it is said, “The king’s daughter is all glorious within.”

* The letter Y was made by the Pythagoreans a symbol of the parting road of human life; one of its branches representing virtue, the other vice.

Let her, moreover, not eat in public, that is, be present at her parents' meals; lest she should see dainties to excite her longing. For though some persons think it a higher virtue to despise present pleasure, to my mind there is greater security for temperance in not knowing the object of desire. I remember reading in a book at school, "that you will hardly find fault with that which has become habitual." Let her learn, even now, not to drink wine, "wherein is excess." However, abstinence is irksome and dangerous to the young, before the body has attained its full strength and proportions. Up to that time, therefore, let her use the bath, if necessity requires; and take a little wine, for her stomach's sake; and have animal food, lest her limbs fail her before they begin to do their duty. I say this as a matter of indulgence unto her, not of command to you—to prevent weakness, not to inculcate luxury. Otherwise, why should not a Christian virgin do that altogether which Jewish superstition does in part, by the rejection of certain animals and meats; not to mention the Indian Bramins and Egyptian Gymnosophists, who live entirely upon barley flour, and rice, and fruits? If glass is of such a value, are not pearls of greater price? Let the daughter of promise live as those lived who were the children of promise. Where the grace is equal, let the labor be equal also. Let her be deaf to instruments of music, and be a stranger to the very use of the pipe, and harp, and lyre.

Let her every day repeat a lesson culled from the flowers of Scripture, learning a number of verses in Greek, and immediately afterward being instructed in Latin; for, if the tender mouth is not properly molded from the very commencement, the pronunciation will acquire a foreign accent, the faults of which will pass into her native tongue. You must be her governess, and the model of her untutored infancy; take care that she sees nothing in you, or in her father, which she would be wrong in doing. Remember that you are her parents, and that she learns more from your example than your voice. Flowers are soon dead; the violet, and the lily, and the crocus, soon fade in an unwholesome air. Never let her go into public, unless accompanied by you; nor enter the sanctuaries built over martyrs' tombs, or churches, without her mother. Beware of the nods and smiles of the young and gay; let the solemn vigils and nocturns be spent without departing from her mother's side. Do not let her attach herself too closely to any one of her maidens, or make her ear the depositary of her secrets. All should hear what is said to one. Let the companion she chooses be not well dressed or beautiful, or with a voice of liquid harmony; but grave, and pale, and meanly clad, and of solemn countenance. Set over her an aged virgin, of approved faith, and modesty, and conduct, to teach and habituate her, by her own example, to rise up by night for prayer and psalms, to sing her morning hymns, and to take her place in the ranks, like a Christian warrior, at the third, and sixth, and ninth hours; and, again, to light her lamp and offer up her evening sacrifice. Let the day pass, and the night find her at this employment. Prayer and reading, reading and prayer, must be the order of her life; nor will the time travel slowly when it is filled by such engagements.

Teach her also the working of wool, to hold the distaff, to place the basket in her lap, to ply the spindle, and draw out the threads. But let her have nothing to do with silk, or golden thread. Let the clothes she makes be such as to keep out the cold, and not a mere compromise with nakedness. Her food should be a few herbs, and so forth, with sometimes a few small fishes. But not to go into details on this subject, of which I have elsewhere spoken more at length,—let her always leave off eating with an appetite, so that she may be able to read and sing immediately. I do not approve of protracted and inordinate fastings, especially for those of tender years, where week is added unto week, and the use

of oil and fruit prohibited. I have experienced the truth of the proverb, "A tired ass will not go straight." But the rule to be constantly observed in fasting is this: take care that your strength is equal to your journey, lest, after running the first stage, you break down in the middle of it.

But to return to the subject: when you go into the country, do not leave you daughter at home; she must neither be able or know how to do without you, and be afraid of being left alone. She must not converse with people of the world, or be in the same house with ill-conducted virgins. She must not be present at the marriages of her servants, or have any thing to do with the games of noisy domestics.

Let her delight not in silk and jewels, but in the holy writings, where there is no gold or mosaic painting, like that on Babylonian leather, to arrest the eye; but sound learning, corrected by sound faith, to inform the mind. Let her first learn the Psalter, and give her hours of leisure to these holy songs. From the proverbs of Solomon she will gather practical instruction; Ecclesiastes will teach her to despise the world; in Job she will find examples of virtue and endurance. Then let her go to the Gospels, and never lay them down. The Acts of the Apostles, with the Epistles, must be imbibed with all the ardor of her heart. When her mind is thoroughly stored with these treasures, she may commit the prophets to her memory, together with the Heptateuch, and the books of Kings and Chronicles, with those of Esdras and Esther. The Song of Solomon she may read last without danger; if she reads it earlier, she may not discern that a spiritual union is celebrated under carnal words. All the Apocryphal books should be avoided; but if she ever wishes to read them, not to establish the truth of doctrines, but with a reverential feeling for the truths they signify, she should be told that they are not the works of the authors by whose names they are distinguished, that they contain much that is faulty, and that it is a task requiring great prudence to find gold in the midst of clay. The works of Cyprian should be ever in her hands. She may run over the Epistles of Athanasius, and the books of Hilary, without any danger of stumbling. Let her pleasures be in such treatises and writers of such character as most evince the piety of an unwavering faith. All other authors she should read to judge of what they say, not simply to follow their instructions.

You will answer here, "How can a woman living in the world, in the midst of so vast a population as that of Rome, look after all these things?" Do not, therefore, undertake a burden which you are unable to bear; but as soon as you have weaned her with Isaac, and clothed her with Samuel, send her to her grandmother and aunt. Restore its most precious jewel to the chamber of Mary, and place her in the cradle of the infant Jesus. Let her be brought up in the convent, in the company of virgins; let her never learn to swear; to think falsehood a sacrilege; be ignorant of the world; live the life of an angel; be in the flesh, but not of it; believe every human being to be of the like nature with herself. Thus, to say nothing more, you will be released from the difficulty of keeping her, and the risk of watching over her. Better to regret her absence than to be in perpetual anxiety, what she is saying, with whom she is conversing, whom she is recognizing, whom she is glad to see. Resign to the care of Eustochium the infant whose very cries are even now a prayer for thine own good. Make her the companion of her holiness, hereafter to be its heiress. From her earliest years let her look to her, love her, admire her, whose very words, and gait, and dress, are a lesson of the virtues. Let her dwell in the bosom of her grandmother, who may reproduce in her grandchild what she before experienced in her daughter, and who knows by experience how to bring up, and keep,

and instruct virgins, whose glory it is, in the virgins she has nurtured, to be daily bringing forth fruit a hundred fold. O happy Paula! happy virgin! happy child of Toxotius, more ennobled by the virtues of her aunt and grandmother than by her high descent! O Læta, that you could see your mother-in-law and sister-in-law, and the mighty souls that animate their feeble bodies! I doubt not your natural modesty would then set the example to your daughter, and change the first command of God for the second law of the Gospel. You would then care little for the longing after other children, but would rather offer up yourself to God. But as there is a time for indulging, and a time for abstaining from it; as a wife has no power over her body; as unto what calling soever a man is called, in that let him remain in the Lord; as he, who is under the yoke, ought to run so as not to leave his fellow in the mire,—restore that whole in thy daughter which thou hast divided in thyself. Hannah never received again the son whom she had vowed to God, after he had been once presented in the temple, thinking it unbecoming that a future prophet should be brought up in the house with one who was yet looking to have children. When she conceived and brought forth, she dared not enter the temple and appear empty before God, till she had first payed what she owed; but after this sacrifice she returned home, and brought forth five children, because she had brought forth her first-born unto God. Admirest thou the happiness of that holy woman? Imitate her faith. If you only send Paula, I will undertake the office of her nurse and teacher; I will carry her on my shoulders, old as I am; I will mold into form her lisping words, much prouder of my office than any worldly philosopher,—training up not a Macedonian king to die by Babylonian poison, but a hand-maiden and bride of Christ, a fit offering to an everlasting kingdom.

XIX. MICHAEL NEANDER.*

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

MICHAEL NEANDER was the son of a tradesman, of the town of Sorau, Hans Neumann by name, and was born in 1525. His father had destined him for a tradesman also; and, as the occupation called for long journeys on horseback, he determined to lose no time in making his son a good horseman. He, therefore, placed him upon a gaunt and restive horse, without a saddle, and bade him ride him to water. On his reaching the pond the horse threw him into it, and he was only saved from drowning by the efforts of some chance bystanders, who lifted him again to his seat. As he rode in at the gate, a stone was thrown at him, which cut his head and covered his face with blood. Thus, wet and bleeding, he returned home. But his father, instead of showing pity for his sufferings, ordered him to mount, upon the spot, a still wilder horse, which he did. But he was again thrown off and his arm broken. And when his mother and his relatives gathered around him in tears, his father upbraided him harshly with these words: "To a cloister with you; you are of no use to any body." Thus was his whole course of life shaped by this one day of mishaps.

The rector, Heinrich Theodore, of Sorau, was his first teacher. In his seventeenth year, in 1542, he went to the University of Wittenberg. "Although at that time I was quite young," says Neander, of himself, "I yet listened attentively for three years to Luther's lectures and sermons, and many of his excellent thoughts. I wrote down with care, nor shall I ever forget them so long as my life lasts;

* Sources. 1. "Events in the Life of Michael Neander. A contribution to the religious and social history of the 16th century. By W. Havemann, professor of history at Göttingen."

2. Neander's works, as follows, viz:—(a.) Two Latin Grammars. (b.) "De re poetica Graecorum, libri quatuor. E notationibus M. Neandri praeceptoris sui collecti Opera J. Vollandi." Editio secunda. 1592. (c.) "Catechesis M. Lutheri Graeco-Latina." "Patrum Theologorum Graecorum sententiae." "Apocrypha; hoc est. narrationes de Christo, etc., extra Biblia." Basileae, per Joh. Oporinum. 1563. (d.) "Compendium Dialecticae ac Rhetoricae." 1581. (e.) "Orbis Terrae partium succincta explicatio." 1586. (f.) "Orbis Terrae divisio compendaria, in usum studiosae juventutis in schola Ifeldensi." 1586. Nova editio. (g.) "Compendium Chronicorum, conscripta in schola Ifeldensi." 1586. Havemann cites the following in addition:—(h.) "Mankind's Mirror." Nuremberg, 1620. (i.) "Theologia megalandri Lutheri." Eisenach, 1587. (k.) "Advice to a good nobleman and friend; or, how to guide and instruct a boy." Eisenach, 1690. Says Havemann, "this is an incomparable little book."

3. (a.) "Funeral Sermon at the burial of the venerable M. Neander. Delivered by Valentine Mylius." Leipzig, 1596. (b.) Vollborth's "Panegyric upon M. Neander." 1777.

for I often recall them with delight, in sorrow and affliction they are my consolation, and they aid me, moreover, in my labors both with old and young."

In the year 1547, when, after the battle of Muhlberg, Neander, in common with all the professors and students at Wittenberg, deserted the place, he obtained, through the recommendation of Melancthon, the post of (colleague) assistant in the school of Nordhausen. Shortly after, he was chosen conrector and was employed also as tutor to the children of Herr Schmied, the Mayor. The rector of the school, whose name was Basilius Faber, imposed upon the youthful Neander, then fresh from the conceited air of Wittenberg, and regarding "grammar and syntax" as "insignificant trifles," the humiliating task of teaching the older boys the "*Advanced Syntax*," (*majorem Syntaxin majoribus*) a work which he had "never even seen, much less heard of or studied."

In the year 1550, Neander was called to the rectorship of the cloister-school at Ilfeld, in the Harz. Here, in 1544, Thomas Stange had been chosen abbot of the monastery. But he afterward joined the Protestants, and then, under the patronage of the noble Count of Stolberg, founded the school, to which, at the recommendation of Melancthon and Schmied, he now called Neander. When, in the year 1559, the devout, conscientious abbot lay upon his death-bed, he commended the school most urgently to Count Stolberg's care, and to the faithfulness of its rector, Neander.

This dying injunction Neander kept in view even to the close of his own life. The amount of labor that he accomplished would appear well-nigh incredible. When he entered upon his office, he found but twelve scholars in attendance; nine years later, in 1559, this number had increased to forty. And until within a few days before his death, or during the space of forty-five years, he took the charge of the whole school entirely upon himself, never employing a colleague.* He was, moreover, compelled to defend the very existence of the school itself against many who endeavored to wrest the cloistral domains into their own possession. At the same time he accomplished much literary labor—giving to the press, during his life-time, thirty-nine books, and leaving behind him, in manuscript, fourteen more.

Many of his contemporaries, Melancthon in particular, have borne testimony to the excellent results with which his teachings were attended. Melancthon deemed the school at Ilfeld, "by reason of the faithful labors of Neander," to be the best seminary in the country.

* "Tantum præstitit unus vir, qui nullum in administratione scholæ usque ad ultimum fere senii limen collegam haberet."

Thus that eminent man, Laurentius Rhodomannus, a pupil of his, and later a professor at Wittenberg, writes of Neander.

Said Rhodomannus: "Neander has proved himself an exceedingly skillful and successful teacher. He has carried scholars forward, within the space of three or four years, so far in the languages and the arts, and grounded them so thoroughly in catechetics, that, when he had done with them, they were fitted to enter at once upon important posts, whether in the school or in the church. Especially have they been so thoroughly drilled in the three languages, that they have not inelegantly imitated the Greek classics." And the learned Caselius, a scholar of Neander's, in Nordhausen, said: "Neander's boys, on entering the university, have at once taken precedence of most others."

Of his text-books, so far as I am acquainted with them, I have already, in part, spoken elsewhere. In his grammars, he constantly dwelt more upon the elementary than the abstruse, and placed general principles and rules, that were universally binding, before unimportant particulars and anomalous exceptions. Hence his text-books were brief; but, whatever he undertook, he intended should be fully and entirely comprehended by the learner.

His instructor, Melancthon, whom he highly esteemed, undoubtedly urged him to give his attention to the physical sciences. It was said of Neander, that "he was such an adept in medicine and chemistry, that he was enabled, by means of serviceable remedies, to extend a helping hand to his scholars when sick."* His "*Hand-Book of Natural Philosophy*" was in much repute.

His "*Compendium Chronicorum*" gives, in the compass of forty pages, a survey of the history of the world, from Adam to the year 1575. The subjects of the various chapters are, "Jews," "Egyptians," "Persians," "Greeks," and "Romans;" then "The Period of the Migration of Races, ending with Charlemagne," "Mohammed and the Saracens," and "Argonautæ, or the Crusades, Tartars, and Turks." And it ends with a glance at the prophecies of Daniel.

In geography, he wrote a somewhat extended text-book, called "*Orbis terræ partium succincta explicatio*;" and a second, much shorter, with the title, "*Orbis terræ divisio*."

The first mentioned compend is a singular book; now proceeding methodically, and again branching off into the strangest of digressions. It begins by giving a list of the various authorities made use of. Then there follows a concise and clear treatise on the mathematics of geography, (in which the sun moves around the earth,) and a history of the science. Next are described Europe, Asia, Africa, and the oceans; and lastly the islands, among which America is enumerated. Some of the stories interspersed in this book we have already cited.

* A favorite scholar of his, Thalius, afterward a physician at Nordhausen, "gathered 72 species of grasses in the neighborhood of Ilfeld, and carefully pressed and dried them between the leaves of an old and huge monkish missal."—*Orbis explicatio*. article. Nordhausen.1

In his description of Goldberg, Neander not only communicates much upon Trotzendorf, but also narrates that unsuccessful, first, and last attempt of his own to learn to ride. Under the article "Sagan," he gives a long story; how, after a fourteen years absence from his native land, he returned thither, and how he was every where received like a prince. Every where they made feasts in his honor, at which, too, vocal and instrumental music were heard, and often the wine flowed till midnight. The like, also, befell him in his native town, where he found his aged and honored mother still living; though, alas! his father had died but a short time before. In describing Nordhausen, he takes occasion to speak of a favorite scholar of his, who died there, the physician Thalius, tells of his botanical studies, and of his death, caused by being thrown from a carriage. Nor does he stop here, but gives a letter of Thalius's, and cites Latin and Greek poems composed upon his death. And still further—he adds a list, many pages long, of the good scholars shaped in Ilfeld, but remarks that nevertheless he had some very bad ones, and gives the history of one of these, who was beheaded. He communicates this, that teachers may learn, from his example, not to be dispirited on account of some untoward experiences, but rather to keep up a courageous heart. Thus much in characterization of the larger geography. The lesser, but thirty pages long, is far more concise.

Let us now turn back to his life. In the year 1562, he married Anna Winkler, of Nordhausen, by whom he had two sons and two daughters. The daughter Maria married Valentin Mylius, the pastor at Ilfeld, who in after years pronounced the eulogy upon Neander.

In this eulogy we find an exceedingly edifying sketch of the last days of the venerable man. His sickness began a few days previous to Easter, in the year 1595. But, before he took to his bed, he celebrated the Lord's supper at church, after full confession. Upon his death-bed he testified his hearty adhesion to the Lutheran confession of faith. When his pastor read to him from the 73d Psalm, he repeated, with joyful emphasis, the words, "The strength of my heart, and my portion forever," and said, "I will give praise to God forever; for he is the strength of my heart, and I shall not be afraid; he is my portion and I am his, and all the powers of darkness can not sunder us forever." His last words were, "Ah, how long shall I linger here before I go to that blessed place? There shall I meet and welcome my dear grand-parents, my parents, and so many dear, pious christians, so many good and glorious friends; God grant me a speedy entrance into that happy land! Amen." Then, after waving a last farewell to all, he fell asleep in the Lord without a groan or a murmur. It was four in the afternoon of the 26th of April, 1595.

XX. BACCHANTS AND ABC-SHOOTERS.

[Translated and condensed, from Schmid's Encyclopedia of Education, for this Journal.]

THE Bacchants, or wandering scholars, *scholares vagantes* or *scholastici* (for, as the two classes of names indicate, they bore the character both of teachers and scholars,) were a class of educational persons belonging to the Middle Ages, to whom there scarcely remains any analogous body at the present day. The name Bacchant, although its reference in this form to the heathen god of wine is obvious, is undoubtedly a modification, either by popular wit or by these sons of the muses themselves, of the Latin *vagantes*.

A wandering life characterized this class of men during full five hundred years; although recent researches indicate a division of this period into the following several shorter ones, in the latter of which appear the Bacchants proper and their scholars, the "A B C-Shooters."

1. In the Romish church it was a regulation, from a very early period, that no bishop should consecrate a priest who had not the actual cure of a congregation. Traces of this law are found as soon as in the fifth century. In the sixty-seventh letter of Synesius, bishop of Ptolemais from 410 to 431, complaint is made of priests who have no fixed location, and who, if they obtain one, leave it at their pleasure to wander about, to settle where they can obtain the best living. Synesius calls these Bakantiboi, and excuses himself for using such a barbarous word, in such a way as to show clearly that it is not Greek, but a Latin word adapted from *vacare* or *vagari*, by the common change of *b* for *v*. In spite however of repeated injunctions, and even of the decree of Pope Alexander III., at the Lateran synod of 1179, that any bishop performing such a consecration without a parish should maintain the priest at his own expense, such consecrations were continually made, sometimes from favor and sometimes on pretense of missionary service. Thus there arose a peculiar class of clergymen, the *clerici vagantes*, whose chief object was to get a living, and who most frequently established themselves in the castles of counts and knights, and served them as chaplains, companions, &c.

2. These clergymen, who have hitherto been wandering about and

seeking their bread singly, appear in the beginning of the thirteenth century as a sort of corporation, or peculiar class, with a well-developed class feeling. At this time they are called *Goliards*, from a fabulous Bishop Golias, who figures in their poems as the chief of their brotherhood, and who is also referred to as *primas* and *archi-poeta*. At this period the schools at Paris, Rheims, and Orleans were flourishing, and thither the young clergymen from the whole west of Europe gathered in great masses; and among them, besides a most profligate kind of student's life, there grew up a freer phase of thinking than had before been known. There are two especially prominent traits in the character of these Goliards; their love of wandering, and their poetical impulses. The first seem to have been derived from the spirit of their age, which found in the crusades both pleasure and stimulus; and is a parallel phenomenon with the wanderings of the journeymen mechanics, which came into vogue with the rise of the towns and their mechanic guilds. Giesebrecht* says: "How accustomed the clergy were to remove from one school to another, and to lead a wandering life for the sake of learning, appears from the words of a zealous preacher of the period, the monk Helinaud. 'The scholastics wander throughout all the cities and the whole surface of the earth; and their many studies bring them understanding. The clergy seek a knowledge of the fine arts at Paris, of the ancient writers at Orleans, of jurisprudence at Bologna, of medicine at Salerno, and of the black art at Toledo; but they seek to learn good morals nowhere.' What a contrast between this student-life and the cloister-like seclusion and strictness which had previously prevailed in the schools!" Their poetry, again, was of a kind which on the one hand completely expresses the adventurousness of their life, and on the other differs materially from that of the troubadours, in that, while the latter composed as laymen in the speech of the people, the Goliards held fast to their clerical character by adhering to Latin. The matter of these compositions was, however, as loose as possible.† Besides amatory lyrics and drinking

* Article on the Goliards and their poetry, "*Universal Monthly Magazine of Science and Literature*," Aug., 1851, p. 29.

† Two rich collections of these Goliard poems have been published; one in London, by Thomas Wright, in 1841, entitled "*The Latin poems commonly attributed to Walter Mapes*;" the other in the "*Library of the Literary Society in Stuttgart*," Vol. XVI. for 1847, under the title "*Carmina Burana*." These are MS. poems, found in the abbey of Benedictbeuren, at the suppression of the convents in Bavaria. As these works are not accessible to all, we subjoin a poetical epistle from the first mentioned, characteristic of the Bacchant poetry.

EPISTOLA GOLIE AD CONFRATRES GALLICOS.

Omnibus in Gallia Anglus Goliardus,
Obediens et humilis frater non bastardus,
Golie discipulis, dolens quod tam tardus,

Mandat salutem fratribus nomine Ricardus.
Accedit ad vos nuncius, vir magnus probitatis,
Magister et dominus Willelmus de Conflatia,

songs, satire especially flourished among the Goliards; and for both they found the best reception in the houses of the bishops and with the abbots. We must consider these gentry as clergy, according to their chief profession; although most of them—and in the fourteenth century we find them numerous in the countries on the Danube, as well as in Suabia and France—are properly to be reckoned mere consecrated *clerici vagantes*. Some of them, however, were students intending to become clergymen, and others adventurers who gave themselves out as such. Their smattering of learning maintained a show of clerical character for them in the eyes of the people, who also felt the less strongly prejudiced against their mode of life, for the reason that the character of the regular clergy and the monks differed from theirs, not in kind, but only in degree.

3. The third period was introduced by the fact that, as, in the thirteenth century, decrees of bishops and synods having been issued, forbidding regular priests to belong to the fraternity of Goliards, in the end of this and the beginning of the next century, an actual distinction grew up between them; and the Bacchants, who had so far had the impudence and the good fortune to protect themselves against any civil jurisdiction by their clerical character, became distinctly separated from the clergy. They now frequented no more the courts of the bishops, but the houses of the peasantry; and found employment as wizards, exorcists, quacks, and panders. They did not en-

Goliardus optimus, hoc non timeatis;
Sicut decet socium ipsum admittatis.
Quidquid de me dixerit, verum teneatis,
Et quod volueritis, per eum rescribatis,
Quæ mihi scripseritis, vel ore mandatis,
Pro posse meo faciam certissime sciatis,
De adventu nobilis nuncii gaudete,
Villam quam intraverit, in ea manete,
Et hora cum fuerit, cum ipso prandete,
Mero delectabili calices implete;
Tempus cum sit frigidum, ad prunas sedete;
Vinum meracissimum manibus tenete;
Calices si fuerint vacui, replete,
Ut bibat et rebibat sæpe suadete.
Modum si excesserit, blande sustinete;
Quod fit in consortio pandere cavete.
Nunc, fratres carissimi, scribere studete,

Ordo vester qualis est, modusque dicatis;
Si fas est comedere coctas in lebetes
Carnas vel pisciculos fugatos ad rete;
De Lyæo bibere vel de unda Thetæ;
Utrum frui liceat Roma vel Agnetæ;
Cum formosa domina ludere secrete,
Continenter vivere nullatenus jubete.
Qualiter me debeam gerere docete;
Ne magis in ordine vivam indiscrete
Donec ad vos veniam, sum sine quiete:
Quid vobis dicam amplius? In Domino
valete.
Summa salus omnium, filius Mariæ,
Pascas, potes, vestiis filios Golyæ,
Et conservet socios sanctæ confratriæ
Ad dies usque ultimos Enoch et Helyæ.
Amen.

One of the "*Carmina Burana*," in the second named collection, contains a sort of rule of the order; beginning,—

De Vagorum ordine
Dico vobis jura,
Quorum vitæ nobilis
Dulcis est natura.

In this Goliard poetry, which contains some very beautiful portions, as for instance in their poems on Spring, we find the rich source of the students' songs and *Commeratiæder*. For instance, the "*Mihi est propositum in taberna mori*," is a Goliard poem of the last ten years of the twelfth century.

tirely give up poetry and song, but composed now not in Latin but in German. It seems from Hoffmann von Fallersleben, "*History of Ecclesiastical Poetry to the Time of Luther*," 2d ed., p. 371, that they were accustomed to commit the outrageous impropriety of entering the churches and singing absurd parodies on the hymns of the church.

4. The wandering scholars appear in a new phase at the end of the fourteenth century, from which time they are first known by the term Bacchants. We find them also called *trutani ceretani*;^{*} and the number of popular nicknames given them was infinite, while in this period they still held fast to their vagrancy and their swindling. "They have been in the Venusberg; have seen all future things; can secure against pains and wounds; they know a prayer of St. Gregorius, which has so much virtue that as often as they say it a soul is freed from hell; but a crown must be given them first."[†] They no longer appear as students and poets, but in the double character of old school-boys and wandering knaves. They no longer frequent courts and universities, but the town schools; and, where they could get an engagement, they hired themselves out as assistant teachers. It seems, however, that little of their pedagogical efforts were bestowed upon the small boys or A B C-Shooters, whom they carried about with them, ostensibly to place them in good schools and instruct them themselves, but in truth only to make them beg for them.[‡]

The praiseworthy zeal of the cities in the support and oversight of their schools, led to the establishment of many institutions for poor scholars, which, after the fashion of that age, in which the begging monks filled so important a place among the people, attracted the Bacchants, and furnished accommodation to them. In Breslau alone there were at once as many as a thousand Bacchants and scholars, all supported by alms. The school-houses, like the cloisters, were furnished with a multitude of cells for the accommodation of these wandering scholars, and the towns furnished to the lodgers in them both firewood and charity. There were, for example, some hundreds of these chambers in the school-house of St. Elizabeth, at Breslau. Elsewhere, these lodging-rooms were not in the school-houses, but formed a sort of hospital for poor scholars; and, although these were deficient in the first requisite, cleanliness ("In Dresden," says Plater, "the chambers in the school were full of lice;" and the school hos-

^{*} J. U. Mayer's "*Dissertation on the Wandering Scholars*," Leipzig, 1675.

[†] Mayer. And M. Crusius, later, in his "*Annales Suevici*," Vol. 2, p. 663, describes them as cheating at play.

[‡] The name A B C-Shooters is made up from the obvious reference to their studies, and from the cant phrase "to shoot," applied to their half-authorized mode of stealing for their master's support.

pital, in Breslau, was all full of "great lice as large as hempeesds,") still provision was made even for the requisite medicinal assistance. Even private persons received these wandering scholars, out of benevolence, or as a kind of tutors; Zingg, for instance, says: "Also, I came to a gentleman, who was a native of a town belonging to the city (Memmingen,) whose two boys I put in the school, and with whom I staid a year and taught his boys for him." How little studying was done by these scholars, however, appears from Zingg, who, after ten years' wandering among the schools of Reiswitz, Biberach, Ehingen, Balingen, and Ulm, had learned nothing except how to write; and from Plater, who, after nine years' school wandering, confesses, "had my life depended on it, I could not have declined a noun of the first declension." And how small were their efforts for speed, we may see, for instance, from the fact that, after Plater had been taken by his Bacchant, Paul Sommermatter, on a journey into Germany, they remained in Zurich some eight or nine weeks, waiting for certain others who had traveled into Saxony. During this time they lived entirely by begging. There was no discipline maintained by these teachers, except that their "Shooters" were much cudgelled and otherwise maltreated.

5. Luther here and there speaks of the Bacchants, whom he describes as "stupid blockheads and asses;" and there is a well-known anecdote of Melancthon, that he once, when a little boy, completely vanquished an old fellow of a Bacchant by the extent of his learning. The Reformation, in newly organizing school systems, must of course put an end to the Bacchants and their vices; yet we find traces of them even after that period. In the sixteenth and seventeenth centuries, we find the name of Bacchant universally used to describe those scholars who, as *beani* or "foxes," at making their entrance into the universities, were obliged to submit to the scurrilous festivities of the so-called "Deposition," in which even the professors took part. Among other things, an ox-hide was thrown over them; and, as a symbol of their putting off the Philistine "Old Adam," the horns were taken off it; whence the name, from *deponere*. They were also deluged with wine; their mental hearing was opened by rubbing their ears with the end of a stick; an examination was held upon them; and, in conclusion, they received a kind of absolution, and were declared worthy to become votaries of academical wisdom. Thus, we read in "*Luther's Table Talk*,"* how he once held such a "deposition," and absolved some students just entering from "*Bean und Bachanten*."

* "*Table Talk*," Vol. 2, Ch. 44, Sec. 6, 7.

According to a description given by Tholuck,* from an old Strasburg publication, of 1671, called "*Ritus Depositionis*," the ceremony began with the summons, "Come, ye Bacchants, come forward; I will, at your festival, depose you in the best manner." Elsewhere it appears that the name Bacchant was used as a general term of reproach for the literary class. In the year 1680, Balthasar Schuppius, we are told, "following the universal custom of students of wandering about, went a hundred and fifty miles on foot, to see towns and universities." This sort of student wandering is entirely distinct from the ancient vagabondizing; but Schuppius himself was obliged, afterward, to oppose "the vicious old students or *vaganten*." That there existed such a class, and that thus the ancient Bacchants are the rightful lineal predecessors of the modern begging students, appears from Mayer's dissertation, already quoted. He says: "Indeed, there are the like now (i. e., *scholastici vagantes*,) who keep up their title to the name of students by singing or by gabbling a sort of Latin, such as it is, on the road, but who otherwise are exactly like ordinary beggars." An edict for the circle of Suabia, in 1720, names in the same list of all possible sorts of disreputable and vagrant persons, "wandering scholars, and displaced clergymen and monks;" and enacts that "they shall not be admitted into the circle without a certificate, upon which, when found correct, they may be forwarded to their friends; but, if it is false, they are to be punished." In such company the "wandering scholars" were not far from the gallows. Even in this nineteenth century this class seems not to be entirely extinct. In the year 1844, there came to the writer of this article, two persons claiming to be students of the university of M——, who, except the singing, had all the exact marks of Mayer's *silhouette* of two hundred years old. Giesebrecht refers to another account of a surviving trace of the ancient Bacchants, from Willkomm's "*Two Years in Spain and Portugal*," [Vol. 3, p. 206.] "In the university of Salamanca there prevails this custom: that the poorer students, during the summer vacations, wander all over the country, and, by singing ballads to the ladies, and vulgar songs to the common people, gain a scanty remuneration, which enables them to continue their studies."

* "*Academical Life of the Seventeenth Century*," Halle, 1868, p. 208.

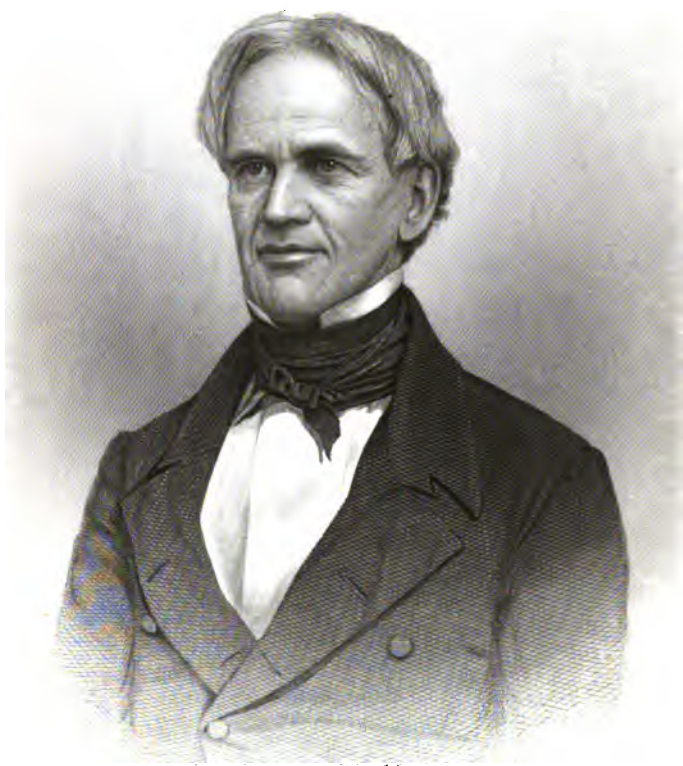
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Engraved by J. H. Buffum from a daguerotype

Horace Mann.

Secretary of the Board of Education, Massachusetts, 1827-1848

L. H. MARRAS

HORACE MARRAS, the poet, Secretary of the Board of Education of the State of Massachusetts, and President of the American Society of Authors, Lowell, Ohio, was born in the town of Northampton, Mass., May 1, 1867. His father, William Marras, was a farmer, and he grew up by working a small farm. He attended the common schools, and then, for thirteen years of age, he went to the Lowell School. He was a student of an upright life, and was a member of the Lowell School of Agriculture.

The mother, in answer to the question, "What are the influences of his education?" They were the influences of the Lowell School, and it was the influence of the family that he received. He was a student of the Lowell School, and it was the influence of the family that he received. He was a student of the Lowell School, and it was the influence of the family that he received.

His father was a man of a high character, and he was a member of the Lowell School. He was a student of the Lowell School, and it was the influence of the family that he received. He was a student of the Lowell School, and it was the influence of the family that he received. He was a student of the Lowell School, and it was the influence of the family that he received.

His mother, who was a woman of a high character, and she was a member of the Lowell School. She was a student of the Lowell School, and it was the influence of the family that she received. She was a student of the Lowell School, and it was the influence of the family that she received. She was a student of the Lowell School, and it was the influence of the family that she received.

Mr. Marras' early life was spent in the Lowell School, and it was the influence of the family that he received. He was a student of the Lowell School, and it was the influence of the family that he received. He was a student of the Lowell School, and it was the influence of the family that he received.

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Figure 1. 1. 1.

I. HORACE MANN.*

HORACE MANN, the first Secretary of the Board of Education for the State of Massachusetts, and President of Antioch College, at Yellow Springs, Ohio, was born in the town of Franklin, Norfolk County, Mass., May 4, 1796. His father, Mr. Thomas Mann, supported his family by cultivating a small farm. He died when the subject of this memoir was thirteen years of age, leaving him little besides the example of an upright life, virtuous inculcations, and hereditary thirst for knowledge.

The narrow circumstances of the father limited the educational advantages of his children. They were taught in the district common school; and it was the misfortune of the family that it belonged to the smallest district, had the poorest school-house, and employed the cheapest teachers, in a town which was itself both small and poor.

His father was a man of feeble health, and died of consumption. Horace inherited weak lungs, and from the age of twenty to thirty years he just skirted the fatal shores of that disease on which his father had been wrecked. This inherited weakness, accompanied by a high nervous temperament, and aggravated by a want of judicious physical training in early life, gave him a sensitiveness of organization and a keenness of susceptibility, which nothing but the iron clamps of habitual self-restraint could ever have controlled.

His mother, whose maiden name was Stanley, was a woman of superior intellect and character. In her mind, the flash of intuition superseded the slow processes of ratiocination. Results always ratified her predictions. She was a true mother. On her list of duties and of pleasure her children stood first, the world and herself afterward. She was able to impart but little of the details of knowledge; but she did a greater work than this, by imparting the principles by which all knowledge should be guided.

Mr. Mann's early life was spent in a rural district, in an obscure county town, without the appliance of excitements or opportunity for display. In a letter before us, written long ago to a friend, he says:—

I regard it as an irretrievable misfortune that my childhood was not a happy one. By nature I was exceedingly elastic and buoyant, but the poverty of my

* This Memoir is abridged in part from an article in Livingston's "*Law Journal*," which also appeared in Livingston's "*Eminent Americans*."

parents subjected me to continual privations. I believe in the rugged nursing of Toil, but she nursed me too much. In the winter time, I was employed in in-door and sedentary occupations, which confined me too strictly; and in summer, when I could work on the farm, the labor was too severe, and often encroached upon the hours of sleep. I do not remember the time when I began to work. Even my play-days,—not play-days, for I never had any,—but my play-hours were earned by extra exertion, finishing tasks early to gain a little leisure for boyish sports. My parents sinned ignorantly, but God affixes the same physical penalties to the violation of His laws, whether that violation be willful or ignorant. For willful violation, there is the added penalty of remorse, and that is the only difference. Here let me give you two pieces of advice, which shall be *gratis* to you, though they cost me what is of more value than diamonds. Train your children to work, though not too hard; and, unless they are grossly lymphatic, let them sleep as much as they will. I have derived one compensation, however, from the rigor of my early lot. Industry, or diligence, became my second nature, and I think it would puzzle any psychologist to tell where it joined on to the first. Owing to these ingrained habits, work has always been to me what water is to a fish. I have wondered a thousand times to hear people say, "I don't like this business;" or, "I wish I could exchange for that;" for with me, whenever I have had any thing to do, I do not remember ever to have demurred, but have always set about it like a fatalist; and it was as sure to be done as the sun is to set.

What was called the love of knowledge was, in my time, necessarily cramped into a love of books; because there was no such thing as oral instruction. Books designed for children were few, and their contents meager and miserable. My teachers were very good people but they were very poor teachers. Looking back to the school-boy days of my mates and myself, I can not adopt the line of Virgil,

"O fortunatos nimium sua si bona norint."

I deny the *bona*. With the infinite universe around us, all ready to be daguerre-typed upon our souls, we were never placed at the right focus to receive its glorious images. I had an intense natural love of beauty, and of its expression in nature and in the fine arts. As "a poet was in Murray lost," so at least an amateur poet, if not an artist, was lost in me. How often, when a boy, did I stop, like Akenside's hind, to gaze at the glorious sunset; and lie down upon my back, at night, on the earth, to look at the heavens. Yet with all our senses and our faculties glowing and receptive, how little were we taught; or rather, how much obstruction was thrust between us and nature's teachings. Our eyes were never trained to distinguish forms or colors. Our ears were strangers to music. So far from being taught the art of drawing, which is a beautiful language by itself, I well remember that when the impulse to express in pictures what I could not express in words was so strong that, as Cowper says, it tingled down to my fingers, then my knuckles were rapped with the heavy ruler of the teacher, or cut with his rod, so that an artificial tingling soon drove away the natural. Such youthful buoyancy as even severity could not repress was our only dancing-master. Of all our faculties, the memory for words was the only one specially appealed to. The most comprehensive generalizations of men were given us, instead of the facts from which those generalizations were formed. All ideas outside of the book were contraband articles, which the teacher confiscated, or rather flung overboard. Oh, when the intense and burning activity of youthful faculties shall find employment in salutary and pleasing studies or occupations, then will parents be able to judge better of the alledged proneness of children to mischief. Until then, children have not a fair trial before their judges.

Yet, with these obstructions, I had a love of knowledge which nothing could repress. An inward voice raised its plaint for ever in my heart for something nobler and better. And if my parents had not the means to give me knowledge, they intensified the love of it. They always spoke of learning and learned men with enthusiasm and a kind of reverence. I was taught to take care of the few books we had, as though there was something sacred about them. I never dog-eared one in my life, nor profanely scribbled upon title pages, margin, or fly-leaf, and would as soon have stuck a pin through my flesh as through the pages of a book. When very young, I remember a young lady came to our house on a visit,

who was said to have studied Latin. I looked upon her as a sort of goddess. Years after, the idea that I could ever study Latin broke upon my mind with the wonder and bewilderment of a revelation. Until the age of fifteen I had never been to school more than eight or ten weeks in a year.

I said we had but few books. The town, however, owned a small library. When incorporated, it was named after Dr. Franklin, whose reputation was then not only at its zenith, but, like the sun over Gibeon, was standing still there. As an acknowledgment of the compliment, he offered them a bell for their church, but afterward, saying that, from what he had learned of the character of the people, he thought they would prefer sense to sound, he changed the gift into a library. Though this library consisted of old histories and theologies, suited perhaps to the "conscript fathers" of the town, but miserably adapted to the "proscript" children, yet I wasted my youthful ardor upon its martial pages, and learned to glory in war, which both reason and conscience have since taught me to consider almost universally a crime. Oh, when will men learn to redeem that childhood in their offspring which was lost to themselves! We watch for the seed-time for our fields and improve it, but neglect the mind until midsummer or even autumn comes, when all the *artificiality* of the vernal sun of youth is gone. I have endeavored to do something to remedy this criminal defect. Had I the power, I would scatter libraries over the whole land, as the sower sows his wheat field.

More than by toil, or by the privation of any natural taste, was the inward joy of my youth blighted by theological inculcations. The pastor of the church in Franklin was the somewhat celebrated Dr. Emmons, who not only preached to his people, but ruled them for more than fifty years. He was an extra or hyper-Calvinist—a man of pure intellect, whose logic was never softened in its severity by the infusion of any kindness of sentiment. He expounded all the doctrines of total depravity, election, and reprobation, and not only the eternity but the extremity of hell torments, unflinchingly and in their most terrible significance, while he rarely if ever descanted upon the joys of heaven, and never, to my recollection, upon the essential and necessary happiness of a virtuous life. Going to church on Sunday was a sort of religious ordinance in our family, and during all my boyhood I hardly ever remember of staying at home.

As to my early habits, whatever may have been my shortcomings, I can still say that I have always been exempt from what may be called common vices. I was never intoxicated in my life—unless, perchance, with joy or anger. I never swore—indeed profanity was always most disgusting and repulsive to me. And (I consider it always a climax,) I never used the "vile weed" in any form. I early formed the resolution to be a slave to no habit. For the rest, my public life is almost as well known to others as to myself; and, as it commonly happens to public men, *others know my motives a great deal better than I do.*

Mr. Mann's father having died when he was thirteen years of age, he remained with his mother on the homestead until he was twenty. But an irrepressible yearning for knowledge still held possession of him. "I know not how it was," said he to a friend in after life, "its motive never took the form of wealth or fame. It was rather an instinct which impelled toward knowledge, as that of migratory birds impels them northward in spring time. All my boyish castles in the air had reference to do something for the benefit of mankind. The early precepts of benevolence, inculcated upon me by my parents, flowed out in this direction; and I had a conviction that knowledge was my needed instrument."

A fortunate accident gave opportunity and development to this passion. An itinerant schoolmaster, named Samuel Barrett, came into his neighborhood and opened a school. This man was eccentric and abnormal, both in appetites and faculties. He would teach a

school for six months, tasting nothing stronger than tea, though in this Dr. Johnson was a model of temperance compared with him, and then for another six months, more or less, he would travel the country in a state of beastly drunkenness, begging cider, or any thing that would intoxicate, from house to house, and sleeping in barns and styes, until the paroxysm had passed by. Then he would be found clothed, and sitting in his right mind, and obtain another school.

Mr. Barrett's speciality was English grammar, and Greek, and Latin. In the dead languages, as far as he pretended to know any thing, he seemed to know every thing. All his knowledge, too, was committed to memory. In hearing recitations from Virgil, Cicero, the Greek Testament, and other classical works, then usually studied as a preparation for college, he never took a book into his hand. Not the sentiments only, but the sentences, in the transposed order of their words, were as familiar to him as his A, B, C, and he would as soon have missed a letter out of the alphabet, as article or particle out of the lesson. This learned Mr. Barrett was learned in languages alone. In arithmetic he was an idiot. He never could commit the multiplication table to memory, and did not know enough to date a letter or tell the time of day by the clock.

In this chance school Mr. Mann first saw a Latin grammar; but it was the *veni, vidi, vici* of Cæsar. Having obtained a reluctant consent from his guardian to prepare for college, with six months of schooling he learned his grammar, read Corderius, Æsop's Fables, the Æneid, with parts of the Georgics and Bucolics, Cicero's Select Orationes, the Four Gospels, and part of the Epistles in Greek, part of the Græca Majora and Minora, and entered the Sophomore class of Brown University, Providence, in September, 1816.

Illness compelled him to leave his class for a short period; and again he was absent in the winter to keep school as a resource for paying college bills. Yet, when his class graduated in 1819, the first part or "Honor" in the commencement exercises was awarded to him, with the unanimous approval of Faculty and classmates. The theme of his oration on graduating foreshadowed the history of his life. It was on the Progressive Character of the Human Race. With youthful enthusiasm, he portrayed that higher condition of human society when education shall develop the people into loftier proportions of wisdom and virtue, when philanthropy shall succor the wants and relieve the woes of the race, and when free institutions shall abolish that oppression and war which have hitherto debarred nations from ascending into realms of grandeur and happiness.

Immediately after commencement (indeed some six weeks before, and immediately after the final examination of his class, so that no time might be lost; for the law then required three years' reading in a lawyer's office, or rather three years to be spent in a lawyer's office without any reference to reading,) he entered his name in the office of the Hon. J. J. Fiske, of Wrentham, as a student at law. He had spent here, however, only a few months when he was invited back to college as a tutor in Latin and Greek. This proposal he was induced to accept for two reasons: first, it would lighten his burden of indebtedness (for he was living on borrowed money;) and, second, it would afford the opportunity he so much desired of revising and extending his classical studies.

He now devoted himself most assiduously to Latin and Greek, and the instructions given to his class were characterized by two peculiarities, whose value all will admit, though so few have realized. In addition to rendering the sense of the author, and a knowledge of syntactical rules, he always demanded a translation in the most elegant, choice, and euphonious language. He taught his Latin classes to look through the whole list of synonyms given in the Latin-English dictionary, and to select from among them all the one which would convey the author's idea, in the most expressive, graphic, and elegant manner; rendering military terms by military terms, nautical by nautical, the language of rulers in language of majesty and command, of suppliants by words of entreaty, and so forth. This method improves diction surprisingly. The student can almost feel his organ of language grow under its training; at any rate, he can see from month to month that it has grown. The other particular referred to, consisted in elucidating the text by geographical, biographical, and historical references; thus opening the mind of the student to a vast fund of collateral knowledge, and making use of the great mental law, that it is easier to remember two or even ten associated ideas than either of them alone.

Though liberal in granting indulgences to his class, yet he was inexorable in demanding correct recitations. However much privation or pain the getting of the lesson might cost, yet it was generally got *as the lesser evil*. One day a student asked the steward of the college what he was going to do with some medicinal preparation he had. "Mr. So and So," said the steward, "has a violent attack of fever, and I am going to give him a sweat." "If you want to give him a sweat," said the inquirer, "send him into our recitation room without his lesson."

While in college, Mr. Mann had excelled in scientific studies. He

now had an opportunity to improve himself in classical culture. A comparison of the two convinced him how infinitely inferior in value, not only as an attainment, but as a means of mental discipline, is heathen mythology to modern science; the former consisting of the imaginations of man, the latter of the handiwork of God.

In the latter part of 1821, having resigned his tutorship, he entered the law school at Litchfield, Connecticut, then at the zenith of its reputation, under the late Judge Gould. Here he remained rather more than a year, devoting himself with great assiduity to the study of the law under that distinguished jurist. Leaving Litchfield, he entered the office of the Hon. James Richardson, of Dedham, was admitted a member of the Norfolk bar, in December, 1823, and immediately opened an office in Dedham.

We believe the records of the courts will show that, during the fourteen years of his forensic practice, he gained at least four out of five of all the contested cases in which he was engaged. The inflexible rule of his professional life was, never to undertake a case that he did not believe to be right. He held that an advocate loses his highest power when he loses the ever-conscious conviction that he is contending for the truth; that though the fees or fame may be a stimulus, yet that a conviction of being right is itself *creative* of power, and renders its possessor more than a match for antagonists otherwise greatly his superior.

In 1827, Mr. Mann was elected to the Massachusetts House of Representatives, for the town of Dedham, and continued to be returned until the year 1833, when he removed to Boston, and entered into a partnership with Edward G. Loring. At the first election after his becoming a citizen of Boston, he was chosen to the State Senate for the county of Suffolk, which post he was returned to for the four succeeding elections. In 1836 that body elected him its president, and again in 1837, in which year he retired from political life to enter upon the duties of Secretary of the Board of Education. During his legislative course Mr. Mann took an active part in the discussion of all important questions, especially of such as pertained to railroads, public charities, religious liberty, suppression of traffic in lottery tickets, and spirituous liquors, and to education.

He advocated laws for improving the system of common schools. He, more than any other man, was the means of procuring the enactment of what was called the "Fifteen Gallon Law," for the suppression of intemperance in Massachusetts. He was a member of the committee who reported the resolves which subsequently resulted in the codification of the statute laws of Massachusetts. He took a leading

part in preparing and carrying through the law whose stringent provisions for a long time, and almost effectually, broke up the traffic in lottery tickets.

But the act by which Mr. Mann most signalized his legislative life in the House of Representatives was the establishment of the State Lunatic Hospital of Worcester. This benevolent enterprise was conceived, sustained, and carried through the House by him alone, against the apathy and indifference of many, and the direct opposition of some prominent men. He moved the appointment of the original committee of inquiry, and made its report, drew up and reported the resolve for erecting the hospital, and his was the only speech made in its favor. After the law was passed, he was appointed chairman of the Board of Commissioners to contract for and superintend the erection of the Hospital. When the buildings were completed, in 1833, he was appointed chairman of the Board of Trustees for administering the institution, and remained on the Board until rotated out of office by the provisions of the law which governed it.

We subjoin a sketch of Mr. Mann's speech in behalf of the resolve for establishing the Hospital:—

Mr. Mann, of Dedham, requested the attention of the House to the numbers, condition, and necessities of the insane within this commonwealth, and to the consideration of the means by which their sufferings might be altogether prevented, or at least assuaged. On reviewing our legislation upon this subject, he could not claim for it the praise either of policy or humanity. In 1816 it was made the duty of the Supreme Court, when a grand jury had refused to indict, or the jury of trials to convict such person, by reason of his insanity or mental derangement, to commit any person to prison, there to be kept until his enlargement should be deemed compatible with the safety of the citizens, or until some friend should procure his release by becoming responsible for all damages which, in his insanity, he might commit.

Had the human mind been tasked to devise a mode of aggravating to the utmost the calamities of the insane, a more apt expedient could scarcely have been suggested; or, had the earth been searched, places more inauspicious to their recovery could scarcely have been found.

He cast no reflection upon the keepers of our jails, houses of correction, and poor houses, as humane men, when he said that, as a class, they were eminently disqualified to have the supervision and management of the insane. The superintendent of the insane should not only be a humane man, but a man of science; he should not only be a physician, but a mental philosopher. An alienated mind should be touched only by a skillful hand. Great experience and knowledge were necessary to trace the causes that first sent it devious into the wilds of insanity, to counteract the disturbing forces, to restore it again to harmonious action. None of all these requisites could we command under the present system.

But the place was no less unsuitable than the management. In a prison little attention could be bestowed upon the bodily comforts and less upon the mental condition of the insane. They are shut out from the cheering and healing influences of the external world. They are cut off from the kind regard of society and friends. The construction of their cells often debars them from light and air. With fire they can not be trusted. Madness strips them of their clothing. If there be any recuperative energies of mind, suffering suspends or destroys them, and recovery is placed almost beyond the reach of hope. He affirmed that he was not giving an exaggerated account of this wretched class of beings, between whom and humanity there seemed to be a gulf, which no one had as yet crossed to carry them

relief. He held in his hand the evidence which would sustain all that he had said. * *

From several facts and considerations, he inferred that the whole number of insane persons in the State could not be less than 500. Whether 500 of our fellow-beings, suffering under the bereavement of reason, should be longer subjected to the cruel operation of our laws, was a question which no man could answer in the affirmative, who was not himself a sufferer under the bereavement of all generous and humane emotions. But he would for a moment consider it as a mere question of saving and expenditure. He would argue it as if human nature knew no sympathies, as if duty imposed no obligations. And, in teaching Avarice a lesson of humanity, he would teach it a lesson of economy also.

Of the 298 persons returned, 161 are in confinement. Of these, the duration of the confinement of 150 is ascertained. It exceeds in the aggregate a thousand years;—a thousand years, during which the mind had been sequestered from the ways of knowledge and usefulness, and the heart in all its sufferings inaccessible to the consolations of religion. * *

The average expense, Mr. Mann said, of keeping those persons in confinement could not be less than \$2.50 per week, or if friends had furnished cheaper support, it must have been from some motive besides cupidity. Such a length of time, at such a price, would amount to \$130,000. And if 150 who were in confinement exhibit an aggregate of more than a thousand years of insanity, the 148 at large might be safely set down at half that sum, or 500 years. Allowing for these an average expense of \$1 per week, the sum is \$52,000, which added to \$130,000 as above, makes \$182,000. Should we add to this \$1 per week for all, as the sum they might have earned had they been in health, the result is \$234,000 lost to the State by the infliction of this malady alone; and this estimate is predicated only of 298 persons, returned from less than half the population of the State.

Taking results then, derived from so large an experience, it was not too much to say, that more than one-half of the cases of insanity were susceptible of cure, and that at least one-half of the expense now sustained by the State might be saved by the adoption of a different system of treatment. One fact ought not to be omitted, that those who suffer under the most sudden and violent access of insanity were most easily restored. But such individuals, under our system, are immediately subject to all the rigors of confinement, and thus an impassable barrier is placed between them and hope. This malady, too, is confined to adults almost exclusively. It is then, after all the expense of early education and rearing has been incurred, that their usefulness is terminated. But it had pained him to dwell so long on these pecuniary details. On this subject he was willing that his feelings should dictate to his judgment and control his interest. There are questions, said he, upon which the heart is a better counselor than the head,—where its plain expositions of right encounter and dispel the sophistries of the intellect. There are sufferers amongst us whom we are able to relieve. If, with our abundant means, we hesitate to succor their distress, we may well envy them their incapacity to commit crime. * *

But let us reflect, that while *we* delay *they* suffer. Another year not only gives an accession to their numbers, but removes, perhaps to a returnless distance, the chance of their recovery. Whatever they endure, which we can prevent, is virtually inflicted by our own hands. Let us restore them to the enjoyment of the exalted capacities of intellect and virtue. Let us draw aside the dark curtain which hides from their eyes the wisdom and beauty of the universe. The appropriation proposed was small—it was for such a charity insignificant. Who is there, he demanded, that, beholding all this remediable misery on one hand, and looking, on the other, to that paltry sum which would constitute his proportion of the expense, could pocket the money, and leave the victims to their sufferings? How many thousands do we devote annually to the cultivation of mind in our schools and colleges; and shall we do nothing to reclaim that mind when it has been lost to all its noblest prerogatives? Could the victims of insanity themselves come up before us, and find a language to reveal their history, who could hear them unmoved? But to me, said Mr. Mann, the appeal is stronger, because *they* are unable to make it. Over his feelings, their imbecility assumed the form of irresistible power. No eloquence could persuade like their heedless silence. It is now, said he, in the power of the members of this House to exercise their highest

privileges as men, their most enviable functions as legislators ; to become protectors to the wretched, and benefactors to the miserable."

The execution of this great work illustrated those characteristics of the subject of this memoir which have signalized his life. The novelty and costliness of the enterprise demanded boldness. Its motive sprung from his benevolence. Its completion without loss or failure illustrated his foresight. It was arranged that no ardent spirits should ever be used on the work, and the whole edifice was completed without accident or injury to any workman. The expenditure of so large a sum as fifty thousand dollars without overrunning appropriations proved his recognition of accountability. The selection of so remarkable a man as Dr. Woodward for the superintendent, showed his knowledge of character. And the success which, after twenty years of experience, has finally crowned the work, denotes that highest kind of statesmanship, which holds the succor of human wants and the alleviation of human woes to be an integral and indispensable, as it is a most economical part of the duties of a paternal government. That Hospital has served as a model for many similar institutions in other states and countries, which, through the benevolent influence of its widely-known success, have been erected because that was erected.

In 1835, Mr. Mann was a member, on the part of the Senate, of a legislative committee to whom was intrusted the codification of the statute law of Massachusetts, and after its adoption he was associated with Judge Metcalf in editing the same for the press.

On the organization of the Board of Education for Massachusetts, on the 29th of June, 1837, Mr. Mann was elected its secretary, and entered forthwith on a new and more congenial sphere of labor. From the earliest day when his actions became publicly noticeable, universal education, through the instrumentality of free public schools, was commended by his word, and promoted by his acts. Its advocacy was a golden thread woven into all the texture of his writings and his life. One of his earliest addresses was a discourse before a county association of teachers. As soon as eligible, he was chosen a member of the Superintending School Committee of Dedham, and continued to fill the office until he left the place. In the General Court his voice and his vote were always on the side of schools.

Mr. Mann withdrew from all other professional and business engagements whatever, that no vocation but the new one might burden his hands or obtrude upon his contemplations. He transferred his law business then pending, declined re-election to the Senate, and—the only thing that caused him a regret—resigned his offices and his active connection with the different temperance organizations. He

abstracted himself entirely from political parties, and for twelve years never attended a political caucus or convention of any kind. He resolved to be seen and known only as an educationist. Though sympathizing as much as ever with the reforms of the day, he knew how fatally obnoxious they were to whole classes of people whom he wished to influence for good; and as he could not do all things at once, he sought to do the best things, and those which lay in the immediate path of his duty, first. Men's minds, too, at that time were so fired with partisan zeal on various subjects, that great jealousy existed lest the interest of some other cause should be subserved under the guise of a regard for education. Nor could vulgar and bigoted persons comprehend why a man should drop from an honorable and exalted station into comparative obscurity, and from a handsome income to a mere subsistence, unless actuated by some vulgar and bigoted motive like their own.* Subsequent events proved the wisdom of his course. The Board was soon assailed with violence by political partisans, by anti-temperance demagogues, and other bigots after their kind, and nothing but the impossibility of fastening any purpose upon its secretary save absolute devotion to his duty saved it from wreck. During a twelve years' period of service, no opponent of the cause, or of Mr. Mann's views in conducting it, was ever able to specify a single instance in which he had prostituted or perverted the influence of his office for any personal, partisan, or collateral end whatever.

It is obvious, on a moment's reflection, that few works ever undertaken by man had relations so numerous, or touched society at so many points, and those so sensitive, as that in which Mr. Mann was now engaged. The various religious denominations were all turned into eyes, each to watch against encroachments upon itself, or favoritism toward others. Sordid men anticipated the expenditures incident

* Dr. William E. Channing was the only man, among his friends and acquaintances, who did not dissuade him from accepting the office. He wrote to him as follows:—

My Dear Sir:—I understand that you have given yourself to the cause of education in our commonwealth. I rejoice in it. Nothing could give me greater pleasure. I have long desired that some one uniting all your qualifications should devote himself to this work. You could not find a nobler station. Government has no nobler one to give. You must allow me to labor under you according to my opportunities. If at any time I can aid you, you must let me know, and I shall be glad to converse with you always about your operations. When will the low, degrading party quarrels of the country cease, and the better minds come to think what can be done toward a substantial, generous improvement of the community? "My ear is pained, my very soul is sick" with the monotonous yet furious clamors about currency, banks, &c., when the spiritual interests of the community seem hardly to be recognized as having any reality.

If we can but turn the wonderful energy of this people into a right channel, what a new heaven and earth must be realized among us! And I do not despair. Your willingness to consecrate yourself to the work is a happy omen. You do not stand alone or form a rare exception to the times. There must be many to be touched by the same truths which are stirring you.

My hope is that the pursuit will give you new vigor and health. If you can keep strong outwardly, I have no fear about the efficiency of the spirit. I write in haste, for I am not very strong, and any effort exhausts me, but I wanted to express my sympathy, and to wish you God speed on your way.

Your sincere friend,

WM. E. CHANNING.

to improvement. Many teachers of private schools foresaw that any change for the better in the public schools would withdraw patronage from their own; though to their honor it must be said that the cause of public education had no better friends than many private teachers proved themselves to be. But hundreds and hundreds of wretchedly poor and incompetent teachers knew full well that the daylight of educational intelligence would be to them what the morning dawn is to night-birds. Bookmakers and booksellers were jealous of interference in behalf of rivals; and where there were twenty competitors of a kind, Hope was but a fraction of one-twentieth, while Fear was a unit. Mr. Mann for many years had filled important political offices; and, if political opponents could not find any thing wrong in what he was doing, it was the easiest of all things to foresee something wrong that he would do. Many persons who have some conscience in their statements about the past, have none in their predictions about the future. And however different and contradictory might be the motives of opposition, all opponents would coalesce; while the friends of the enterprise, though animated by a common desire for its advancement, were often alienated from each other through disagreement as to methods. There was also the spirit of conservatism to be overcome; and, more formidable by far than this, the spirit of pride on the part of some in the then existing condition of the schools,—a pride which had been fostered for a century among the people, not because their school system was as good as it should and might be, but because it was so much better than that of neighboring communities. And, besides all this, it was impossible to excite any such enthusiasm, for a cause whose highest rewards lie in the remote future, as for one where the investment of means or effort is to be refunded, with heavy usury, at the next anniversary or quarter-day. Then questions respecting the education of a whole people touched the whole people. Politics, commerce, manufactures, agriculture, are class interests. Each one is but a segment of the great social circle. While the few engaged in a single pursuit may be intensely excited, the great majority around may be in a state of quiescence or indifference. But, so far as education is regarded at all, it is a problem which every body undertakes to solve; and hence ten thousand censors rise up in a day. It is an object not too low to be noticed by the highest, nor too high to be adjudicated upon by the lowest. Do not these considerations show the multifarious relations of the cause to the community at large, and to the interests and hopes of each of its classes? And now consider the things indispensable to be done, to superinduce a vigorous system upon a decrepit one,—changes in the

law, new organizations of territory into districts, the building of school-houses, classification of scholars, supervision of schools, improvements in books, in methods of teaching, and in the motives and ways of discipline, qualifications of teachers, the collection of statistics, the necessary exposure of defects and of mal-administration, &c., &c.,—and we can form a more adequate idea of the wide circuit of the work undertaken, and of the vast variety of the details which it comprehends.

Mr. Mann, in entering on his work, availed himself of three modes of influencing the public. 1. By lectures addressed to conventions of teachers and friends of education, which were held at first annually in each county of the state. It was made his duty, as secretary, to attend these conventions, both for the purpose of obtaining information in regard to the condition of the schools, and of explaining to the public what were supposed to be the leading motives and objects of the legislature in creating the Board. His addressees, prepared for these occasions, and for teachers' associations, lyceums, &c., were designed for popular and promiscuous audiences, and were admirably adapted to awaken a lively interest, and enlist parental, patriotic, and religious motives in behalf of the cause. 2. In the Report which he was required annually to make to the Board of his own doings, and the condition and improvement of the public schools, he presented more didactic expositions of the wants of the great cause of Education, and the relations which that cause holds to the interests of civilization and human progress. 3. In the "*Common School Journal*," which he conducted on his own responsibility, he gave more detailed and specific views, in regard to modes and processes of instruction and training, and the general management of schools.

Of his numerous lectures, seven were published in a volume,* prepared for the press, by a special request of the Board, in 1840. These lectures alone would establish for him a permanent reputation as an eloquent writer, and profound thinker, in this department of literature. But his twelve Annual Reports constitute an enduring monument of well-directed zeal in the public service, and of large, comprehensive, and practical views of educational improvement, and of his power as a master of the English language. We shall, in justice to Mr. Mann, and for the valuable suggestions which even an imperfect analysis of these remarkable documents must impart, pass them in rapid review.

* Lectures on Education, by Horace Mann, pp. 338. *Contents*.—Lecture I. Means and Objects of Common School Education. II. Special Preparation, a prerequisite to Teaching. III. The Necessity of Education in a Republican Government. IV. What God does, and what He leaves for Man to do, in the work of Education. V. An Historical View of Education; showing its dignity and its Degradation. VI. On District School Libraries. VII. On School Punishments.

ANALYSIS OF MR. MANN'S REPORTS AS SECRETARY OF THE MASSACHUSETTS BOARD OF EDUCATION.

IN his FIRST REPORT, submitted less than five months after his acceptance of the post of Secretary of the Board of Education, Mr. Mann presented a comprehensive survey of the condition of the public schools of the state, under four heads; viz., I. The situation, construction, condition, and number of the school-houses; to which he devoted a SUPPLEMENTARY REPORT, with a free exposition of his views in regard to ventilation and warming, size, desks, seats, location of school-houses, light, windows, yards or playgrounds, and the duty of instructors in regard to these structures. These were accompanied with two plans of the interior of school-houses. II. *The manner in which the school committees performed their duties.* Under this head he specified their neglect in regard to the time of examining teachers, the character of the examinations, the hesitation in rejecting incompetent candidates; their neglect of the law requiring them to secure uniformity of school books, and furnishing them to the scholars at the expense of the town, when the parents neglected to furnish them—their negligence in not enforcing attendance, regularity, and punctuality, and in not visiting the schools as the law demanded. The causes of this neglect, want of compensation, and consequently of penalty for non-performance of duties, the hostility often induced by a faithful performance of duty, and the ingratitude with which their services were treated, thus preventing the best men from accepting the office. Remedies for these evils were also suggested; viz., compensation for services, penalties for neglect, and an annual report by each committee. III. *Apathy on the part of the community in relation to schools.* This is of two kinds. The apathy of those indifferent to all education, which, in the influx of an ignorant and degraded population, would naturally increase; and apathy toward the public or free schools, on the part of those who considered them as not supplying the education needed, and hence sought to procure that education for their children, in academies and private schools. Under this head, he propounded the true theory of public schools, the measures necessary to secure their efficiency, and the objections to private schools as means of popular education. IV. *Competency of Teachers.* The obstacles to this competency were considered; viz., low compensation, preventing its being followed as a profession; the low standard of attainment required; and the ulterior objects of those who engaged in it temporarily. With a few remarks concerning the necessity of school registers, apparatus, &c., and the best time for the election of school officers, the report closed.

Mr. Mann's SECOND REPORT, after briefly reviewing the evidences of progress in Nantucket, and some other large towns, during the previous year, and the delinquencies of others, is mainly occupied with the discussion of the importance of better instruction in language, in the public schools, and the best methods of effecting it. The existing methods of instruction in spelling and reading are described, their defects noted, and the measures proposed for remedying them mentioned. The teaching of the young child words before letters (a plan previously advocated by Dr. Gallaudet,) is strongly recommended, and cogent reasons given for its adoption. The faulty character of the selections in school reading-books, are noticed, their want of connection and interest to the pupil, the utter unintelligibility of many of them; spellers and definers discarded as suitable means of giving children ideas of the meaning of words; dictionaries for study, regarded

as better, but still exceptional—the preparation of readers, detailing in simple and interesting style, events of home life—popular treatises on natural science—voyages and travels and, as the vocabulary of the pupil increases, and his perceptions of matters of argument and reason increases, the advance to the discussion of higher topics may be encouraged. Compositions, translations, and paraphrases, should be required early, and generally should be of a descriptive rather than a didactic character. The effects of this method of instruction are portrayed in the vivid language of the secretary—its elevation of the taste, refinement of the manners, and the preparation which it would give the community for the enjoyment of a higher and purer literature. With a brief discussion of the question whether the Board of Education should recommend a series of school books, and some incidental allusions to matters of detail, the report closes.

Mr. Mann commences his **THIRD REPORT** with congratulations to the Board of Education, on the evidences of progress and improvement evinced by the school returns, and other facts which he lays before them; and, after stating briefly the efforts made for the instruction of children on the lines of railroad then in course of construction, and the number and character of the violations of the laws relative to the employment of children in manufactories, without giving them opportunities of education, he proceeds to discuss, in all its bearings, the necessity of libraries in school districts. He gives at length, statistics, carefully collected, relative to the number, character, and accessibility of the existing libraries in the state, showing that there were in the state, including college, society, theological, and other public libraries, some 300,000 volumes; that the use of them was confined to not over 100,000 persons, while 600,000 had no access to them—that one hundred towns of the state had no public libraries of any description; that of the books in the libraries, very few, not over one-twentieth, were adapted to the use of children, or young persons; that many of them were out of date, old, and incorrect; that the greater part of those in circulation were works of fiction, and many of them of injurious or immoral tendency, while a few were composed mainly of historical and scientific works. Other facts are stated, showing the prevalent tendency in the popular mind, to read only, or mainly, works of fiction and amusement. The mental and moral influence of various descriptions of reading, is next fully discussed. The effect of reading, in the formation and development of character illustrated. Statistics are next given of the lyceum and other lectures, maintained in the state, their advantages and disadvantages are shown, and the impossibility of their acting as substitutes for libraries, in the work of public instruction, fully demonstrated. The reasons why school district libraries should be established, and at the expense of the state, in part, are forcibly stated—the density of the population, the necessity for high education to sustain such a population—the advantages of the subdivision of districts, in carrying libraries to every man's neighborhood—the inability of the small districts to compete, unaided, with the larger, in supplying themselves with libraries, yet their greater need of them, from the brevity of their period of school sessions, are all urged. The character of the books necessary for such libraries, is then dwelt upon; natural science, biography, well-written history, agricultural and popular scientific works—works on physiology and hygiene, on morals and their applications—and, when practicable, biographical dictionaries, encyclopedias, and other works of a similar character, as reference books, are specified. The general demand for libraries, throughout the state, is noticed in conclusion.

In his **FOURTH REPORT**, Mr. Mann, after a brief general review of the gratifying progress of the state, in educational matters, in the three years preceding, and a portrayal of the material advantages which would ensue from the publication and circulation of the abstracts of the school reports, enters upon a full discussion of the topics suggested by these reports, prefacing it by a brief account of the principles on which schools have been supported since 1647, in Massachusetts.

The topics treated are the following : school districts—the evils of their minute subdivision—the remedies suggested are the reunion of small districts, the placing the whole management of the schools, where it was placed originally, in the hands of the towns, and the organization of union schools for the older scholars. The last measure is urged on the grounds of the economy of the plan, and the advantage gained in management and discipline ; the condition and repair of school-houses is next considered, and a tax suggested, once in three or five years, to furnish means to the committee to keep the school-house in good repair. The inefficiency and unproductiveness of expenditure for public instruction, is next dwelt upon—the statistics of private school expenditure for instruction, in the branches taught in the public schools, given ; its wastefulness shown ; the greater advantages which would result from the expenditure of the same sum on the public schools, demonstrated ; and the moral evils which the present course causes, exhibited. The suggestions of the reports in regard to *teachers*, are then considered. The advantage of increasing the number of female teachers, discussed ; the deficiencies in the qualifications of those examined, commented upon ; and the necessity of their possessing a thorough knowledge of common school studies, aptness to teach, ability in management and discipline, good manners, and unexceptionable morals, urged. The necessity of strict uniformity in school books, is demonstrated ; the advantages arising from the introduction of school apparatus and school libraries, mentioned ; constancy and punctuality of attendance urged, on the grounds of the monstrous loss and waste of time and money which are involved in irregularity and absence ; and the fearful deprivation of the best hours of life to the young, a loss not to be repaired. The enforcement of regular and punctual attendance is advised, by the efforts of the teachers to attach children to the school, by the use of the register, the notification of parents, the example of the teacher, and appeals to parents and guardians to encourage it. The duties of superintending or town committees, and of prudential committees, are briefly considered ; manifestation of parental interest in the schools, the evils of forcible breaking up the schools, and of absences from final examinations, referred to ; and the report closes with a general retrospect.

In his **FIFTH REPORT**, Mr. Mann, after his usual resumé of the results attained the previous year, and a few remarks on the advantage of increasing the number of meetings, and multiplying the points at which conventions of the friends of education should assemble, and some passing notice of the improvement in school districts, school-houses, appropriations of money by the towns, amount and regularity of attendance, length of schools, and uniformity of school books, discusses at length the best methods of ascertaining the qualifications of teachers for their work, a duty devolving, by law, on the town or superintending committees. Under the head of moral character, he recommends, where the candidate is not previously known to the committee, strict scrutiny of his credentials, and a registry of the names of those who recommend them, and denounces, in the strongest terms, those who would be guilty of furnishing recommendations to persons

morally disqualified for the high calling of teachers of youth. Passing over the matter of the scholarship of the teacher, which can generally be ascertained without much difficulty, he next considers the best method of ascertaining the ability of the teacher to impart knowledge, and his capacity for managing and governing a school—points of great importance, but which many of the school committees had declared impossible to be ascertained. In regard to the first, he recommends that the candidate should be questioned on his method of using the blackboard, his mode of teaching reading, whether he requires the children to understand the meaning of the words, and the sense of the passage read, his instruction in pronunciation, his time and method of teaching the arithmetical signs, his mode of instructing in geography, grammar, and arithmetic, his practice in regard to reviews, alternations of studies, &c. In relation to his ability to manage and govern a school, he suggests inquiries into his methods of preserving order and quiet in his school; his views relative to the necessity and frequency of corporeal punishment; his practice in exciting emulation by prizes, &c. He also suggests that inquiry should be made in regard to the special preparation made by the candidate for teaching, what instruction he has received on the art of teaching, either in normal schools, or from books or teachers' periodicals. Some further suggestions are thus made relative to the details of the examination of teachers.

The two Shaker societies had the previous year refused to allow their teachers to be examined, or their schools visited. The secretary shows, with great force, the absurdity of their course, and then passes to illustrate, by means of statistics and otherwise, the inequality in the means of education in different towns in the state. The facts being stated, he demonstrates by irrefragable arguments, and by the testimony of several of the largest employers of labor in the commonwealth, the difference which this inequality of education makes in the productive value of the labor of the educated and uneducated. He thus shows, conclusively, that the state and individuals would be very greatly the gainers, in a pecuniary sense, by the universal diffusion of education. That a person with a good common school education will, in the same business, ordinarily earn fifty per cent. more than one without education—and this with less injury or expense of tools or machinery; and that such persons usually live better, and are better members of society. The argument is an admirable one.

In his *SIXTH REPORT*, Mr. Mann passes in review the progress of the preceding year, in the school appropriations, the attendance, vacations in the annual schools, employment of female teachers, compensation of teachers, reports of school committees, breaking up of schools, qualifications of teachers, dismissal of incompetent teachers, school registers, and school district libraries; and proceeds, under the head of *selection of studies*, to urge the importance of the introduction of the study of physiology into the schools. To do this effectually, he goes at considerable length into a statement and illustration of the laws of life and health, and the daily and hourly violations of them by the masses. He also submits the opinions of eminent physicians in regard to the importance of the study of physiology and hygiene to the young, and enforces these opinions by further argument and illustration. This portion of the report furnishes, in itself, an admirable essay on physiology and hygiene, and is well worthy of perusal and study.

Mr. Mann, in his *SEVENTH REPORT*, after his customary review of the condition of the schools of the state, proceeds to give an account of the observations made

in his European tour of the preceding year, in which he had visited a large number of schools in England, Ireland, Scotland, Prussia, Germany, Holland, Belgium, and France. He visited not only the public schools of these countries, but their institutions for the blind, deaf mutes, orphans, vagrants, and juvenile offenders, also. Leaving these topics, however, Mr. Mann comes again upon his own appropriate ground, and considers the fearful evils of a partial system of education, as exhibited in England, giving numerous facts demonstrating the great inequality of the opportunities of education, the disproportion in the salaries of teachers, the vile and often degrading and obscene books used in the lowest class of schools, and the necessity of a general supervisory power on the subject of education. The school-houses, with the exception of some of the palaces devoted to private or endowed schools in England, he regarded as decidedly inferior to those of Massachusetts, in convenience and in ventilation. The reading-books, especially in Germany, were better than ours, as being more practical in their character. There was but little more apparatus there than here. The blackboard was universally used, and for more purposes than here. In some schools he found the standard weights and measures of the country—a valuable aid to the understanding of the comparative quantities contained in them. In some of the schools, as in Holland, there were cards containing fac-similes of the coins of the realm; reading boards or frames (since introduced here,) were also found there. Models of implements of utility, collections of shells, minerals, seeds, woods, &c., and occasionally paintings of considerable value; and, in nearly all, tasteful though cheap engravings and maps adorned the walls. The Lancasterian schools he found upon the wane, a “more excellent way” having been substituted for them. He was much pleased with the mental activity displayed in the Scotch schools, and with the thoroughness of their training in reading, and in exercises in language, but thought there was too much harshness, and too strong appeals to emulation in their management.

But the Prussian schools were, in his view, superior to any others he saw in Europe. After reviewing briefly the orphan and vagrant schools of Potsdam, Halle, and Horn, giving to the apostolic Wichern his due meed of praise, he proceeds to treat of the classification of the Prussian schools, the method of teaching in the primary classes; and here he urges with great force the advantage of the system adopted there of teaching words before letters. He also suggests that the phonic or *lautir* method of spelling, which he found in use in Prussia, might with advantage be adopted here. After a brief reference to the way in which reading is taught in the higher classes, he proceeds to speak of their methods of instruction in arithmetic and mathematics, in grammar and composition. In writing and drawing, in geography, by the sketching of outlines on the blackboard; in thinking exercises, knowledge of nature, the world, and society; alluding, under these heads, to the careful and thorough preparation of the teachers for their work of instruction, and the entire absence of text-books, in instruction in Bible history and music, which he found universally taught in Prussia. He next gives an account of the seminaries for teachers, the preliminary course in which their eligibility to become members of the seminaries for teachers was decided, the course of instruction, its extreme thoroughness, and the high moral and religious tone of the instruction. In reviewing the period spent in Prussia and Saxony, he states these facts, viz., that he never saw a teacher hearing a lesson with a book in his hand; he never saw a teacher sitting; and he never saw

a child either arraigned for punishment, undergoing it, or having recently been punished. He does not intend to imply, by the last remark, that corporeal punishment was entirely discarded, but that it was very seldom necessary to resort to it. The earnestness and interest of the teachers in their work, their evidently strong affection for their pupils, and the reciprocal affection engendered by this, were generally sufficient to produce obedience. Educational journals he found abundant, and well sustained. The school inspectors were men of high attainments, and qualified to fill the highest stations. School attendance was made compulsory by law, the parent being imprisoned if he neglected to send his child, after repeated warnings—but so well were the parents convinced of its advantages, that it was seldom necessary to appeal to the law. Mr. Mann next gives a brief account of the higher schools (the real and burger schools,) of Prussia and Saxony; and assigns the reasons why, though the young are thus educated, yet the nation is in a condition of such apathy.

He then proceeds to review some points, in the schools of other countries which he visited. Corporeal punishment was not used in Holland. In Scotland and England, on the contrary, it was in full force; and, in some of the proprietary and endowed schools of England, solitary confinement still prevailed. In France, he found the system of *surveillance* in force in the boarding-schools and colleges—the watching being as close as in a prison. Emulation is an incentive in the English and Scotch schools, of all grades; and is allowed, though not extensively practiced, in the Prussian and Saxon schools. Its application to religious instruction and attainment, Mr. Mann thinks highly objectionable. The religious instruction, both in Great Britain and on the continent, is for the most part sectarian—a measure fraught with many and great evils, not the least of which are its political results. Mr. Mann closes with some eloquent reflections on the reasons we have for thankfulness that our lot was not cast among the effete, worn-out nations of Europe; but that here civilization could have new opportunities of trial, unembarrassed by prescriptive rights, hereditary nobility, an absolute government, feudalism, or pauperism; and sums up with this great truth, that "*In a republic, ignorance is a crime; and that private immorality is not less an opprobrium to the state than it is guilt in the perpetrator.*"

In his EIGHTH REPORT, after giving his usual statistics of the advance in the cause of education in the state, and a few remarks on the increasing employment of female teachers, the enlarged amount of town appropriations, the gratifying increase in the number of school libraries, and the painful necessity of breaking up schools from the incompetency of teachers, he advocates, at some length, the organization of teachers' institutes (which had already been established in New York.) and recommends an appropriation for the purpose; he also notices, with approbation, the organization of county and town teachers' associations, suggests that school registers should hereafter be provided, in book form; specifies the results of an inquiry into the number of towns in which the Bible is not used in the schools; and notices the causes which led to the removal of one of the state normal schools from Lexington to West Newton. He then proceeds to discuss the question of the *distribution of the school moneys among the districts*, giving statistics of the methods heretofore adopted, which were exceedingly various; and, without entering into details, urging the view that the distribution should be made in such a way as to give equal advantages to each district. This does not necessarily require an equal expenditure in each; for one school may be large

and require one or more assistants, another may be small and require but one teacher; one may be composed mostly of large scholars and require a male teacher, another of small scholars and be benefited by having a good female teacher. Connected with this subject is the question of the power of the towns to raise money for school purposes, beyond the minimum required by the statute. Mr. Mann defends the liberal construction of the statute; not only from motives of humanity and philanthropy, but from the evident design of the law-makers, as demonstrated from other enactments bearing upon the question. Another point considered in the report, is the *teaching vocal music* in the schools. He states that about five hundred, or nearly one-sixth of the schools in the commonwealth have already adopted the practice of singing in school; and urges the importance of its universal adoption, from the natural taste for it in all classes, from its refining, softening, and purifying power, from the excellent results which it has produced in other countries, and in our own wherever it has been introduced, for its promotion of health, as furnishing the means of intellectual exercises, and for its social and moral influence. He quotes also the opinions of Dr. Chalmers, and of Napoleon, in regard to the power of music in controlling men. Having thus demonstrated the desirableness of this addition to school instruction, he proceeds to consider the means of accomplishing the object. He suggests that the ability to sing should, as far as possible, be made one of the qualifications of the teacher; and that, where this is impracticable, in the larger towns, a teacher should be hired, and in the smaller towns, benevolent persons, accomplished in the art, should volunteer to bestow instruction.

The NINTH REPORT commences with some statistics of great interest; one table, showing that there were but twenty-two towns in the commonwealth which had not availed themselves of the state provision for school libraries; another showing the progress of the school fund for ten years; a third giving the amount raised by the towns for school purposes, showing that the expenditure for schools, per annum, was more than one dollar for every inhabitant. The usual statistics in regard to length of schools, attendance, &c., are given; and the necessity of enforcing a more full and punctual attendance, urged with great earnestness and eloquence. The compensation of teachers is next considered, and the secretary urges the necessity of increased compensation, and a higher standard of qualification, especially for female teachers; on the ground of the severity and responsibility of their duties, the cost of training, and the fact that the best talent is now drawn away to private schools and seminaries, in other states, by the higher compensation offered them. The advantages of the new school register are pointed out; the cases in which schools were broken up through the incompetency of the teacher, or other causes, which had largely increased under the new law of the previous year, are next analyzed; the number of new teachers, and the comparatively small number who make teaching a profession, are noticed; an interesting narrative is given of the holding of the first teachers' institutes, whose organization was due to the liberality of Hon. Edmund Dwight; a retrospect of the year, its progress, and its signs of promise, are recorded; and Mr. Mann proceeds to discuss the duties of the state for the future, in the cause of education.

In connection with this subject, he speaks at considerable length of *school-motives*, and of some means for avoiding and extirpating *school vices*. Under these heads, he considers, first, the character, duties, and qualifications of the school

committees, urging the importance of their placing moral improvement, in their examinations of the school, in at least equal rank with intellectual progress, and that they should discountenance the effort on the part of teachers to encourage intellectual progress, at the expense of moral culture, or the development of the evil passions of our nature. He next passes to the motives that should actuate the teacher. He must not be a hireling. He must love children and love his work. The contemplation of his work, in its ever-changing character, and its beneficence should constantly excite him to new zeal, and exhilarate his spirits; if it do not, he is unfit for his work. He should enter the school-room as the friend and benefactor of his scholars; should aim to secure their good-will; should lead, not drive. Order must be maintained, but it should be maintained from reverence and regard for the teacher, and not from fear. No code of laws should be enacted, but every act should be submitted to the conscience of the school. *Is it right?* not *Is it written?* should be the question to be propounded by each scholar to his own conscience. It would be well for the teacher to speak of the duties to be done, of the reasons and rewards appertaining to them, rather than of offenses and their punishments. The moral instruction given by the teacher should have reference to their duties in school and at home; the duty of cultivating the spirit of honor and kindness to each other; the desire of aiding each other's improvement; the cowardice and meanness of attributing to others our own faults and offenses; the despicable character of falsehood and deception, &c., &c.

The government of the school is next considered; the influence of the fear of punishment, and of the restraint of higher motives, is compared; and, though corporeal punishment may be necessary in extreme cases, it should be abandoned when higher motives can be brought to bear upon the pupil. Fear is neither *curative* nor *restorative*; it is, at some times and in some cases, preventive, and hence should not be proscribed from the teacher's list of motives, but when both teacher and pupil reach that higher plane of action, for which, we are striving, we may hope to substitute love and duty for it. In this connection, Mr. Mann expresses himself decidedly opposed to the practice of expelling refractory and disobedient children from the school; they should be retained and subdued. In the exercises of the school-room, every true teacher will consider the train of *feeling*, not less than the train of *thought*, which is evolved; and the importance of being alive to the bearing and influence of them upon the character of his pupils can not be overrated.

Imperfect recitations, and their penalties, may exert an unhappy influence. The teacher should not induce them by giving too long lessons, and he should not suffer any scholar habitually to break down in recitation; and, above all, a class should not be allowed to do so, from the loss of the sense of shame, contempt for the study, and recklessness, which would follow. The other temptations in regard to lessons are next considered, and the means of obviating and overcoming them stated. The slurring or shirking lessons, the acted falsehood of procuring others to do the work, and then presenting it as the pupil's own, the prompting others at recitation, and the relying on others to prompt one, and the evils which follow from them, and the best means of preventing them, are fully stated. The use of keys, or answers, in mathematical studies, is also condemned, not more for the ignorance of the principles of mathematics which it exhibits, than for the deception and falsehood which it inevitably occasions; and the teacher

is recommended to give out original questions and problems, to thwart the practice.

The prevention of whispering, and other forms of communication, is the next topic considered, and the various methods taken to prevent it are discussed, and the moral danger attendant upon some of them noticed. The intense occupation of the pupils, and the elevation of the moral standard to such a tone as shall array the moral force of the pupils against whispering, and in favor of self-denial, are commended as the most effectual preventive.

Truancy is another school-vice to be overcome. This can be done by rendering the school attractive, by careful and accurate registration, and by frequent conference with parents. The *motives* to be brought to bear on children are numerous. The objects of knowledge should be made attractive, both by their order of presentation and the manner of exhibiting them; this requires high powers and attainments on the part of the teacher. Fear, ambition, emulation, if used as motives, must be used sparingly, and with a full consciousness of the evils which would result from their excessive application. The relative rank which is assigned to mental and moral qualities in the teacher's mind, will determine the propriety or impropriety of using emulation as an incentive. With some appropriate remarks on the preparation for school examinations, showing the necessity of their being only the measure of the actual progress of the pupils in knowledge, and some admirable suggestions on the possibility of inculcating moral lessons through intellectual exercises, and a contrast of the inductive with the dogmatic method of instruction, this able report closes.

Mr. Mann's Tenth Report commences with the announcement of some cheering facts relative to the advancement of the cause of education in the state. The amount appropriated by the towns for the support of schools, had risen from \$400,000, in 1837, to \$620,000, in 1845. The number of female teachers employed had increased from 3591 to 4997, while the number of male teachers was only 215 more than nine years previous. More than \$1,200,000 had been expended during the same period for the erection and repair of school-houses; the amount of apparatus had increased a hundred fold; the methods of instruction, through the influence of normal schools and teachers' institutes, and the greater strictness of examinations, had been greatly improved. Examinations both of teachers and schools had been conducted, in many instances, by written or printed questions. The government and discipline of the schools had been much improved; induced by a higher degree of competency on the parts of the teachers, more careful examination of the teachers, and visitation of the schools, and deeper interest on the part of parents; five hundred schools, almost one-sixth of the entire number, had been taught, and well taught, without a resort to corporeal punishment. The aggregate attendance had been a little advanced, though too little; and the average length of the schools had increased, since 1837, fifteen per cent. The circulation of the school abstracts had accomplished a vast amount of good, and the teachers' institutes and normal schools, were well attended, and were qualifying a better class of teachers for the state.

Having stated these encouraging facts, Mr. Mann next proceeds to give some account of the Massachusetts school system, commencing with the history of its origin and the arguments for a system of *free schools*. He specifies, first, the argument adduced for it by its early founders,—the necessity of universal education for the promotion of the Protestant faith,—an insufficient argument, because on

that ground the Romanist should oppose it; next, the argument that it was necessary for the preservation and perpetuity of republican institutions; this, too, an untenable ground, as a monarchist should, in that case, be opposed to it; the argument of the political economist, and of the moralist, who extends the positions of the economist, are next stated; and Mr. Mann proceeds to defend free schools, by an argument resting on higher grounds than either. Laying down the postulate that every child of the human family has the same right to an education that he has to inhale the air which keeps him in life, or to enjoy the light of the sun, or to receive that shelter, protection, and nourishment, which are necessary to the continuance of his bodily existence, he proceeds to defend this postulate by the following argument. Property, whether real or personal, has for its main, primary, and natural elements and ingredients, the riches of the soil, the treasures of the sea, the light and warmth of the sun, fertilizing clouds, streams, and dews, the wind, and the chemical and vegetative agencies of nature. But these are the gifts of God, not to individuals, but to the race; hence the individual can have but a life tenure, and is bound to transmit the property thus acquired, not only unimpaired, but improved, to the next generation. Again, of that portion of property which may be said to be the direct result of human toil, how very small a portion is there, for which the present generation is not indebted to those which have preceded it; our government, laws, institutions, our houses, roads, churches, the arts, sciences, discoveries, and inventions, by which we are enabled to apply labor profitably, were all, or most of them, handed down to us by those who have preceded us; and we are but the trustees of the accumulations of the ages to those who shall come after us. It follows from these premises that the next generation have a claim on that which we hold as property, such as the ward has upon the guardian, and hence there is an obligation on us to qualify those yet in their minority, for their future inheritance, and they have a right to the use of so much of their future inheritance as may be necessary thus to qualify them, before they come into full possession. Mr. Mann illustrated this also in other ways, as by the case of several proprietors of land on the same stream, where those above can not corrupt, or injure the quality, or diminish the quantity, of water to which those below are entitled, and thus the occupant below has some claim upon the waters above, before they reach his land; or, in the case of persons occupying the same vicinity, one can not injure or vitiate the quality of the atmosphere, which the others are to breathe. He sums up the argument as follows: "The successive generations of men, taken collectively, constitute one great commonwealth."

The property of this commonwealth is pledged for the education of all its youth, up to such a point as will save them from poverty and vice, and prepare them for the adequate performance of their social and civil duties.

The successive holders of this property are trustees, bound to the faithful execution of their trust by the most sacred obligations; because embezzlement and pillage from children and descendants, are as criminal as the same offenses, when perpetrated against contemporaries. Having thus laid his foundations broad and deep, he proceeds to show how the free school system of Massachusetts is reared upon them; giving first the constitutional provision relative to free schools, and then, under the following heads, in popular language, the substance of the legal enactment, and decisions bearing on the subject. Territorial organization of the state, duty of towns to maintain schools (giving under this head the decision

of the supreme court in the case of *Cushing vs. Inhabitants of Newburyport*), school districts, prudential committees, district school-houses, school district taxes, contiguous school districts, in adjoining towns, union school districts, school committees, duty of the town committee to provide a school when the prudential committee fails to do so, duty of the town committee in regard to schools kept for the benefit of all the inhabitants of the town, visitation of schools, school-books, religious liberty, teachers, Board of Education, school registers, inquiries and returns, committees' reports, school abstracts, reports of the Board of Education, apparatus, district school libraries, state normal schools, teachers' institutes, penalties for not providing and for withholding the means of education, aids and encouragements to education, provision for answering the requests of other states and countries.

With an eloquent peroration on the results which have already been realized from this general diffusion of education in the state, Mr. Mann closes this long and able report, occupying in all nearly 300 pages.

The ELEVENTH REPORT announces an advance of more than \$50,000 over the preceding year in the appropriations for the support of schools, an increase of 241 in the number of female teachers employed, and an advance in the monthly stipend paid to both male and female teachers; which, however, especially in the case of females, it still pronounces far below what it should be, and urges a decided increase. The schools were held an average period of eight months, and the attendance was also increasing. The tables in the school abstracts had been prepared by the secretary, and an important one added, arranging the towns in the state in the order of their merit or delinquency in regard to attendance of scholars; thus demonstrating an important fact, that the attendance was much better in the scattered rural districts than in the cities and large towns. In this connection he suggests the importance of a change in the apportionment of the income of the school fund, bestowing it according to the actual attendance upon the schools, and urges some potent reasons for such a measure; he refers to an error in the act of 1847, relative to the forwarding reports and returns by the school committees, suggests some improvements in regard to holding teachers' institutes, and to the condition of the state normal schools, &c., and then proceeds to discuss a topic which he deems of vital interest to the state, viz., *The power of common schools, if under proper management and control, and attended by all the children of the state, to redeem the state from social vices and crimes.* During the preceding year, Mr. Mann had addressed a circular to John Griscom, Esq., an eminent teacher and reformer, David P. Page, Esq., of the New York State Normal School, Solomon Adams, Esq., Rev. Jacob Abbott, F. A. Adams, Esq., E. A. Andrews, Esq., Roger S. Howard, Esq., and Miss Catherine E. Beecher, all distinguished and experienced teachers, in which, after stating that he regarded high moral qualifications as an essential to successful teaching, he had propounded the following queries:—

1. "How many years have you been engaged in school-keeping; and whether in the country, or populous towns, or cities?"
2. "About how many children have you had under your care; of which sex, and between what ages?"
3. "Should all our schools be kept by teachers of high intellectual and moral qualifications, and should all the children in the community be brought within these schools for ten months in a year, from the age of four to that of sixteen years; then what proportion,—what per centage,—of such children as you have

had under your care, could, in your opinion, be so educated and trained, that their existence, on going out into the world, would be a benefit and not a detriment, an honor and not a shame, to society? Or, to state the question in a general form, if all children were brought within the salutary and auspicious influences I have here supposed, what per centage of them should you pronounce to be irreclaimable and hopeless? Of course, I do not speak of imbeciles or idiots, but only of rational and accountable beings."

The persons to whom these inquiries were addressed, were all believers in the Calvinistic doctrine of total depravity, and a transmitted sinful nature, so that no theory of the innate goodness, or perfectibility of human nature, could have influenced their opinion, yet there is a wonderful unanimity in the views they expressed. Mr. Griscom, a cautious, careful member of the Society of Friends, a teacher for forty-two or forty-three years, replied: "My belief is that, under the conditions mentioned in the question, not more than two per cent. would be irreclaimable nuisances to society, and that ninety-five per cent. would be supporters of the moral welfare of the community in which they resided. * * * * * Finally, in the predicament last stated in the circular, and supposing the teachers to be imbued with the gospel spirit, I believe there would not be more than *one half of one per cent.* of the children educated, on whom a wise judge would be compelled to pronounce the doom of hopelessness and irreclaimability."

Mr. Page says, under the circumstances stated, "I should scarcely expect, after the first generation of children submitted to the experiment, to fail, in a single case, to secure the results you have named."

Mr. S. Adams says: "So far as my own experience goes, so far as my knowledge of the experience of others extends, so far as the statistics of crime throw any light on the subject, I should confidently expect that ninety-nine in a hundred, and I think even more, with such means of education as you have supposed, and with such divine favor as we are authorized to expect, would become good members of society, the supporters of order and law, and truth and justice, and all righteousness."

Rev. Jacob Abbott replies: "If all our schools were under the charge of teachers possessing what I regard as the right intellectual and moral qualifications, and if all the children in the community were brought under the influence of these schools, for ten months in the year, I think the work of training up *the whole community* to intelligence and virtue, would soon be accomplished, as completely as any human end can be obtained by human means."

Mr. F. A. Adams had met with but two boys, out of nearly four hundred, who had been under his care, of whose correct conduct, under the circumstances supposed, he would have any doubt; and even them he could not regard as utterly irreclaimable.

Mr. E. A. Andrews replies: "On these conditions, and under these circumstances, I do not hesitate to express the opinion that the failures need not be,—would not be,—one per cent."

Miss Beecher says: "Let it be so arranged that all these children shall remain till sixteen, under their teachers, and also that they shall spend their lives in this city (*i. e.* the city where they had been taught,) and I have no hesitation in saying, I do not believe that *one*, no, *not a single one*, would fail of proving a respectable and prosperous member of society; nay, more, I believe every one would, at the close of life, find admission into the world of peace and love."

Having obtained such weighty evidence in favor of the plan suggested, Mr. Mann proceeds to consider what is necessary to carry it out, and states, as the prerequisites, the advancement of all the teachers of the state to the physical, intellectual, and moral qualifications of those who now occupy the highest rank; and, second, the power of enforcing the attendance of all the children of the state in school ten months in the year, during the period between the ages of four and sixteen. Can these prerequisites be attained? He believes they can, and urges the following considerations. The talent and ability for a supply of such teachers as are required, sufficient for this demand, exists in the state, as is evident from the large number who, entering at first on the teacher's profession, forsake it for those more lucrative, and considered more honorable, and who attain in these high distinction. If the standard of requirements was raised, and the compensation put as high as the average of other professions, the number would soon be sufficient; that the state could afford to do this, is demonstrated from the fact that the expense would not exceed three times what it is now, and the saving effected in the diminution of crime and vice, as is easily proved, would amount to tenfold the cost.

In regard to attendance, he shows that the previous legislation of Massachusetts, and other states, settles the question of the power of enforcing attendance; that in most cases it would be a benefit to the parent, and in all to the child; that in the case of the vicious and indolent parent, who now lives on his child's labor, it is but justice; and in the case of the honest and virtuous poor, to whom it might be a hardship, the state could and should compensate for the loss of service. In regard to the loss of service to the public, he demonstrates that the number employed is comparatively few, and that, in these cases, the more intelligent labor of the educated child, over sixteen years of age, would be sufficiently profitable to compensate for any loss which might otherwise ensue. He then urges, in a most eloquent appeal to the Board, the importance of taking this bold step forward, and securing to the rising generation *Universality of Education*.

Some months prior to the presentation of his TWELFTH AND LAST REPORT, Mr. Mann had resigned his office as secretary of the Board of Education, in consequence of his election to Congress. This report was prepared at the request of the Board, as his farewell address to those with whom, and for whom, he had, for almost twelve years, so faithfully labored.

In this report he reviews his past labors, contrasting the condition of the public schools of the commonwealth, at the time he accepted office, with their present state, enumerating, with a justifiable pride, the doubling of the appropriations for schools, the expenditure of \$2,200,000 on school-houses during the period, the rapid increase of female teachers, as indicating the high intellectual culture of the sex, the increase in attendance, the organization and successful operation of the state normal schools and teachers' institutes, the district school libraries, which, in some seven or eight years, had risen from nothing, to an aggregate of more than 91,000 volumes, and the beneficent legislation of the past two years, by which the sphere of the teachers' institutes was enlarged, power given to take land on appraisal for the location of school-houses, the inmates of jails and houses of correction provided with instruction, the idiot and imbecile brought under humanizing and enlightening influences, and the juvenile offender reformed, instead of being brutalized by the associations of a prison. Having thus laid before the Board the existing condition of education in the state, he proceeds, as in his former reports, to discuss a particular topic, or class of topics more at length.

Announcing, as his general subject, "The capacities of our present school system to improve the pecuniary condition, and to elevate the intellectual and moral character of the commonwealth," he proceeds to show the comparative insignificance of Massachusetts with most of the other states in territorial extent; its paucity of mineral resources, and of natural facilities for internal intercourse; its rock-bound and sterile soil, and its political inferiority in the number of its representatives in the national councils; and then, in a passage of rare eloquence and beauty, a regal gem, even among his profusion of brilliant passages, he urges that her very diminutiveness should be a stimulus to higher achievements; and that "the narrow strip of half-cultivated land, that lies between her eastern and western boundaries, is not Massachusetts; but her noble and incorruptible men, her pure and exalted women, the children in all her schools, whose daily lessons are the preludes and rehearsals of the great duties of life, and the prophecies of future eminence,—THESE ARE THE STATE." Developing and applying this idea, he proceeds to consider the common school as the most effective and benignant of all the forces of civilization and progress, and to show how the true business of the school-room connects itself and becomes identical with the great interests of society. He considers, first, the influence of correct views of *physical education*, such as might be disseminated from the school-room. By means of this, life might be prolonged, sickness, insanity, and pain prevented, weakness replaced by vigor, the appetites controlled, and the vices of excess subdued, and the body, God's earthly temple, made fit and seemly for the abode of an indwelling divinity.

Considering next the beneficial effects of a universal diffusion of intellectual education on the community, and especially a community situated like Massachusetts, he shows, by numerous illustrations, that the only efficient preventive of the division of society into a wealthy aristocracy and a poor and dependent laboring class, is that intellectual culture, which shall make the poor in money the equal of the rich, in intellectual power, in inventive genius, and in that skill and creative energy which, whatever may be their employment, will prevent them from remaining in the ranks of the poor. He passes next to the consideration of political education, and its influence in the promotion of wise action, in all that appertains to the government of the state or the nation; in the prevention of arbitrary exactions, of monopolies, of lotteries, and of licenses for the commission of crime; the too frequent administration of the oath, under circumstances inviting perjury; the preservation of the sanctity of the ballot-box; and the inculcation of those great principles of political science, which lie at the basis of all our institutions.

But far higher in importance is moral education. It is a primal necessity of social existence. Educated intellect, uncontrolled by moral principle, would be but the minister of evil. In all the history of man, intellect, unrestrained by conscience, has subverted right, and turned good into evil, until, spite of the restrictions of law, the arguments of the moralist, and the warnings and appeals of the minister of Christianity, it has attained a status so formidable, that some have been ready to give up the world as a total loss, utterly gone to wreck. The attempt to give to all the children of a community a careful moral training has not yet, however, been made; and, till this fails, we need not despair. We have in its favor the strongest testimony of experienced teachers, and, more than this, the declaration of holy writ: "Train up a child in the way he should go, and when he is old he will not depart from it." But to the full consummation of so glorious a result, more is needed than mere training, in morals. *Religious education* is

requisite. By this is meant, not sectarian education, not the teaching after and of this or that denomination, but those great truths of revelation in which all can agree, and which will cause men to know and reverence God, and love their fellow-men. The question how this religious education shall be conveyed to the young, is an important one. It must not be a religion established by government, with its formulas and creeds, for all history shows that this uniformly shelters and encourages the vilest hypocrisy and irreligion. It may not be done by permitting to one sect or another the control of all religious instruction. It can only, in our common schools, be accomplished by putting the Bible, the eternal rule of right, into the hands of the pupils, and causing the teacher, by precept, and above all by example, to enforce and illustrate its blessed teachings.

In this connection, Mr. Mann vindicates, at some length, the Board of Education, and himself, from the charge of encouraging or favoring irreligion, and, as it was charged, with advocating "*godless schools*." He shows, conclusively, that both the Board and its secretary advocated and urged the use of the scriptures in all the schools, from some of which they had been rejected when he came into office, but were restored at his instance; that he and the Board opposed the teaching of denominational catechisms and sectarian instruction, as being inconsistent with the laws, and deleterious to the best interests, of the schools; and he demonstrates, conclusively, that any other course would have proved ruinous to the schools, of great and lasting injury to the community, and of no benefit even to the parties who urged it.

With a thrilling appeal to the citizens of Massachusetts to act worthy of their fathers, and of the noble destiny which the future has in reserve for them, Mr. Mann closes his report.

In a brief SUPPLEMENTARY REPORT, with his usual thoughtfulness for the welfare of others, he suggests to the Board, that his successor will need an office (which he had never had,) a clerk, and some compensation for his traveling expenses; and incidentally, though with great modesty, he unveils a part of his own arduous labors. He had averaged fifteen hours labor per diem, from the time of taking the office, had never had a day of relaxation, and, we may add, what he did not, had expended more than the half of his salary for the cause of education.

The foregoing brief synopsis of Mr. Mann's twelve annual reports to the Board of Education, will give the reader, who is not familiar with the documents themselves, only a faint idea of the fullness and ability with which the vast details of school organization, administration, instruction, and discipline, are discussed. To be appreciated they must be read; and we know of no series of educational reports, by one mind, in any language, so readable, or so instructive. We hope the author will consent to their republication—or, what will be better, will himself recast the whole into a complete treatise on the public schools of Massachusetts.

NOTE.—The original edition of these reports was long ago exhausted, but all except the 10th, 11th, and 12th, were republished in the "*Common School Journal*," sets of which can still be had. To bring the many valuable suggestions, eloquently expressed, of Mr. Mann to the knowledge of our readers, we shall enrich several of the subsequent numbers of our Journal with copious extracts from his publications, arranged under appropriate headings.

In addition to his annual and occasional lectures before county conventions, educational associations, teachers' institutes, and lyceums; and to his annual reports, as secretary, Mr. Mann himself contributed largely to the pages, and superintended the monthly publication, of the "*Common School Journal*," making ten octavo volumes, with which every public library of the country should be supplied, as a valuable part of our educational literature.

No inconsiderable portion of each year was given to the preparation of the Abstracts of the reports and returns of the school committees of the several towns of the Commonwealth—a labor, before his appointment, and since his retirement, performed by a clerk—but which was added to his other duties, and which was cheerfully performed, because of the intrinsic value of the documents thus prepared and published. The real progress and strength of the common school movement, can nowhere be better traced and felt, than in the statistical tables and reports of committees to the several towns, in these abstracts.

Added to all these labors was a correspondence with school officers, teachers, and active friends of educational improvement, both in and out of the state, which, in itself, was sufficient to employ a clerk during regular office hours, but which was performed by Mr. Mann, at such intervals, in any part of the day or night, as he could command, not otherwise appropriated.

To all these labors of the voice and pen—of brain and muscle—at home and abroad—must be added the "wear and tear" of spirits, as well as the physical labor of writing in defense of himself and the board, from numerous attacks which were made, from time to time, upon his and their measures and publications.

The most memorable of these attacks, as connected with the educational policy of the state, was the attempt made in the legislature of 1840, for the abolition of the Board of Education, the discontinuance of the normal schools, the payment back to Edmund Dwight of the money which he had given to aid in the advancement of these schools, and generally for setting things back to the point from which they had started three years before. A majority of the committee on education, sprang a bill upon the House for accomplishing these purposes, without the knowledge of the minority of the committee, who were favorable to the board, until a few hours before the report was submitted. No opportunity was allowed, either by the committee, or the house, for a counter report, but an attempt was made to drive the bill through, without delay and without debate. Delay was secured, a counter report was made by the minority, a debate was

had, and the wise policy of former legislatures in establishing the board, and in inaugurating the system of special institutions, and courses of training for the professional training of teachers was ably vindicated, and, contrary to all expectation, on the part of the best friends of the board, and the secretary, the measure was defeated, and so thoroughly, that no attempt was afterward made to discontinue this department of the government. The friends of public schools, and of special institutions, for the qualification and improvement of teachers, and of state supervision of the great interest of education, in every state, owe a large debt of gratitude to those men who achieved a triumph for the Board of Education, the normal schools, and Mr. Mann, in the legislature of Massachusetts, in 1840.* Defeat there and then, added to the disastrous policy in Pennsylvania, Ohio, and Connecticut, about the same time, in reference to common schools, would have changed the whole condition of public instruction in this country, for a half century, if not forever.

In the winter of 1844, the fundamental principle of the common school system of Massachusetts, its requiring of all teachers to inculcate the principles of piety, justice, universal benevolence, and other Christian virtues, and its prohibition of those things "which are calculated to favor the tenets of any particular sect"—the sole basis of common schools can be maintained among differing and discordant religious denominations—was assailed by violent attacks on the board and their secretary, on the ground that they, and particularly Mr. Mann, had, for the first time, asserted this principle, in such form and to such extent as to exclude all religious men and all distinctive religious instruction from the public schools, and their administration. To these grave charges, variously reiterated, Mr. Mann replied in "*Three Letters*," which were afterward republished in a pamphlet, entitled "*The Common School Controversy*." In these letters Mr. Mann vindicates, in a masterly manner, both the policy of the constitution and school laws of Massachusetts, in this regard, but showed, undeniably, that the charges made against the board—as to the questionable religious character of a majority of the members who had composed it, from time to time, and of the documents which the board or secretary had published, and as to the influence and results of their actions, and of their publication, so far as the same could be

* The majority and minority reports, together with letters from George B. Emerson, Samuel G. Howe, and remarks in the house of representatives, by Hon. John A. Shaw, of Bridgewater, afterward superintendent of public schools in New Orleans, will be found in the "*Common School Journal*" for August, 1840, Vol. II. pp. 225-46. Mr. Mann's own graphic account of the matter, will be found in an address, made by him, at the dedication of the new building erected for the State Normal School, at Bridgewater, in 1846, and which we shall append to this memoir.

measured and ascertained—were without the substance or semblance of truth. These letters, in their newspaper as well as their pamphlet form, attracted much attention, were widely commented upon in the religious as well as the secular press, and did much to disabuse the public mind of the prejudices which had been fostered against the board among many excellent people. The argument of these letters was again ably presented, in a more formal and elaborate manner, by Mr. Mann, in his twelfth annual report, and meets now with general, if not universal, acceptance.

But the document which had at once the widest circulation, and involved the author in the most varied, voluminous, and prolonged controversy, was his Seventh Annual Report, giving the results of his observations in the schools of Europe, in the summer of 1843. The attacks made from various quarters, as to Mr. Mann's statement of facts, or his speculations, as to modes of instructing deaf-mutes, of managing juvenile delinquents, and methods of instruction and discipline in public schools generally, and particularly in those of Prussia, with Mr. Mann's replies and explanations, did a vast amount of good, by attracting the attention of educated men, and of teachers, all over the country, to the condition of our own schools, both public and private, and to the adoption, very widely, of the methods described. The personal animosities which this controversy engendered, we trust, are allayed or forgotten; and we have no disposition to revive or perpetuate them by any further notice, except to remark that, in its progress, this controversy absorbed much time, and occasioned much wear and tear of spirits—but did not diminish the amount or variety of Mr. Mann's official labors. We are not sure but a good, sharp controversy is necessary to get the largest amount of work out of all the faculties of a mind constituted like that of Mr. Mann.

In retiring from his post, as secretary of the Board of Education, in the autumn of 1848, Mr. Mann can justly claim that his labors, during the twelve years he held the office, had more than realized all the promises of good to the common schools which their friends ever made, to induce the legislature to establish the policy of state supervision. If we turn to the "*Memorial of the Directors of the American Institute of Instruction*,"* praying for the appointment of a superintendent of common schools, drawn up by Mr. George B. Emerson, and presented to the legislature of Massachusetts, in 1836, we find that, in every way in which it was claimed an officer might act for the good of the schools, Mr. Mann did act with wonderful efficiency, and the largest results.

* We append this Memorial.

Of Mr. Mann's political career, this Journal is not the place to speak in detail. On the 23d of February, John Quincy Adams, who was the representative from the congressional district in which Mr. Mann resided, died in the United States House of Representatives, at Washington, and Mr. Mann had the great honor of being selected for two terms, by his constituents, as the most suitable person to succeed him. But great as was the urgency, and powerful as were the motives which led Mr. Mann to accept the nomination, and, on his election, to enter again the arena of political life, we, in common with many other personal and educational friends, regretted then, and regret now, his decision. It took him from a field purely beneficent, in which he was more widely known, and more highly appreciated, than any man living, and where he was every day gaining the willing attention of a larger audience, from all creeds and parties in every part of the country. By throwing himself, with his usual earnestness, and universally acknowledged ability, into the discussion of questions on which the country was already bitterly and widely divided, he cut himself off from the sympathy of a large portion of the people, even on questions which involve no party issues; and he soon became immersed in personal controversy, which exhausts the energies of the best minds, without accomplishing large and permanent results in the way of beneficent legislation. Whoever wishes to exert a powerful and permanent influence in the great field of school and educational improvement, must be able to command the attention and sympathy of large portions of all the great political parties into which the country, and every section of the country, is divided and sub-divided. Whatever hopes Mr. Mann, or his friends, entertained, as to his ability to induce the general government to aid, directly or indirectly, the establishment of an educational bureau, in connection with one of the departments at Washington, or with the Smithsonian Institution, were disappointed; and, after an experience of five years, during which time Mr. Mann was a candidate for the office of governor of Massachusetts, he returned again to the educational field, by accepting the presidency of Antioch College, at Yellow Springs, Ohio.

Antioch College was established under the auspices, and by the patronage, of a religious body, designated by themselves "Christians," because the "disciples were first called Christians in Antioch." Mr. Mann, since his residence at Yellow Springs, has united himself in ecclesiastical fellowship with this denomination, officiates for them on the Sabbath, and acts with them in the associations or conventions of their churches and congregations. In the administration and instruction of the college, Mr. Mann claims to stand on an unsectarian, al-

though christian, platform ; but this claim has not shielded him, or the institution, from the assaults of other denominations—not even from the sect, whose charity in founding the college was not broad enough to tolerate such teaching in ethics and morals only, as would satisfy all professed believers in the New Testament.

The college was founded mainly on the "scholarship" principle—and as all the funds collected on this basis, and many thousand dollars more, were converted, not into a permanent fund to pay professors, and meet the annual expenses of the institution, but into buildings which yield no pecuniary income, it was soon ascertained that the larger the number of students sent up on scholarship certificates, the sooner would come the utter bankruptcy of the enterprise. Hence it has come to pass that, between the assaults of sectarian enemies—enemies from within and without the "Christian" church—and the importunate claims of creditors, Mr. Mann has been again involved in unprofitable controversy, and has been compelled to expend energies, needed to realize his large educational plans, in saving the college, as a literary institution, from the wreck of its financial policy.

In the original organization, and through Mr. Mann's entire management of Antioch College, thus far, he has aimed to secure three points, beyond the ordinary scope of American college discipline.

1. To secure for the female sex equal opportunities of education with the male, and to extend those opportunities in the same studies, and classes, and by the same instructors, after the manner of many academic institutions in different parts of the country.

2. To confer the college degrees only upon persons who have not only sustained the requisite literary and scientific character, but who, during their college course, have not been addicted to low and mean associations, nor branded with the stigma of any flagrant vice.

3. To establish, within the walls of the college, a common law, which shall abrogate and banish the now recognized "*Code of Honor*," and exhibit the true relation of students and Faculty to be that of a large family, in which each member regards the honor of others, and of the whole, as sacredly as his own, and does not withhold from the Faculty any knowledge of the transactions of students, which the best good of each student, and of the college, require to be known.

It is too early yet to speak of the success or failure of these plans, so far as they are new, and so far as they challenge comparison with older colleges. If they fail, it will not be from the want of ability, earnestness, and industry, on the part of HORACE MANN.

We should have mentioned that Mr. Mann received the degree of LL.D., from Harvard College, and from Brown University.

It is not the aim of this Journal, in its record of the activity and services of living teachers, and promoters of education, to pronounce a final judgment on the character of the subject of each memoir, or the comparative value of the services rendered. In this instance we copy from the "*American Phrenological Journal*" the following analysis of Mr. Mann's character and life, as dictated from a cast of his head, by a manipulator in the office of Messrs. Fowler, in New York. As Mr. Mann is a believer in the philosophy of Phrenology, he can not object that the record which nature has written "to be read of all men" is transcribed for the edification of our readers.

He has, naturally, great physical and mental activity, and a kind of wiryness of body without sufficient vital force to give the sustaining power necessary for long-continued physical or mental action. His body is slim and slight, yet very well proportioned in its parts. His lungs are not large, the digestive system is moderately developed, and the muscles are proportioned to the lack of vitality; hence he has not a high order of physical power, nor sufficient vitality to sustain such power did he possess it. His chief care in regard to the body should be to combine with his rigid temperance in gustatory matters, an equal amount of temperance in regard to labor, exposure of body, and labor of mind. He has, doubtless, already learned by experience, that physical activity and labor, within due bounds, are essential to clearness and strength of mind, as well as to health of body. He can not, at his age, by muscular labor in the open air, give hardness and great power to his physical system, yet he can in this way accumulate an apparent surplus of physical energy for a given mental effort that may tax the system to an unusual degree.

His brain is large for his body, and although the head in circumference is only of full size, the height of it is unusually great. The head may be denominated a "three-story one," which gives elevation to his character, and an aspiring disposition. His power is moral and intellectual, rather than physical. We seldom find so large a brain in the tophead, in the region of the organs of reason, imagination, sympathy, dignity, perseverance, wit, and moral sentiment, joined with so little basilar brain in the region of the animal and selfish organs.

There are several peculiarities of development which deserve notice. The higher portion of the organ of combativeness is much larger than the lower; the latter being small, giving a disinclination for physical combat and a lack of animal courage, while the former being rather large, gives a tendency to intellectual conflict and moral courage. His destructiveness never leads to the infliction of unnecessary physical pain,—he dreads it, even upon an oyster, yet the anterior and upper part of the organ appears to be sharp and fully developed, which gives efficiency and severity of an intellectual and moral cast, as in criticism and reviews of opinions, character, and conduct, and imparts general thoroughness of disposition.

Secretiveness is insufficient to produce more than ordinary policy and cunning, but the anterior part of the organ, which works with intellect and the elements of taste, imparts an elevated and intellectual policy, which acts in the adjustment of thoughts in such a way that they sting error without offending delicacy. His cautiousness is large in the anterior part, which leads to watchfulness, and that care and painstaking which plans for prospective dangers and emergencies, and guards against accidents, while the posterior part of the organ is not large enough to produce timidity; hence he frequently appears more courageous and brave than the development of the organs of combativeness and destructiveness could inspire him to be. Having planned a course of action, he proceeds among dangers with a full consciousness of their position and character, and, to an observer, seems reckless of them; as a pilot, who knows well where the rocks and bars lie about the channel, steers among them under full sail, to the terror of those who know there are rocks, but are not certain that the pilot knows their locality.

His constructiveness is largely developed, especially in its upper portion, giving

planning talent and engineering ability, and greatly aids him in the construction of a subject and arrangement of thoughts, so as to produce the desired effect with the least friction. The lower, or tool-using part of the organ, is sufficiently developed to give fair practical mechanical talent, but his power in respect to mechanism is less as an executor than as a designer. Were he to devote himself to mechanism, his tendency would be upward toward the artistic, as in fine cutlery, mathematical instruments, and the like.

Ideality is large, which gives not only good taste in respect to the beauties of nature and art, but acts with the moral sentiments and intellect to give polish, refinement, and elevation to thought, sentiment, and expression. Whatever is rude, unbalanced, and imperfect, displeases him; hence he seeks to refine and polish whatever he says and does.

His sublimity is large, and, in conjunction with veneration and firmness, gives a passion for mountain scenery, and whatever is grand in the machinery of the universe; hence he would pursue astronomy with passionate fondness as a field for the range of sentiment, as well as for mathematical study.

If he has any one moral sentiment that overmasters all the rest, and in any sense warps his judgment, it is benevolence, and he will more frequently be called radical and infatuated when following its instincts than from any other cause. It stimulates his conscientiousness, fortifies his pride and ambition, strengthens perseverance, arouses energy, invokes logic, and awakens wit to do its bidding and minister to its ends, and it may therefore be called the "team" of his mind, the central mental element of his nature.

He has a remarkable development of firmness. That organ is both very large and sharp, indicating that it has been unusually stimulated to activity by circumstances, as if his course of life had been a pioneering one,—breaking new ground, enforcing new modes of thought, and running counter to opposition, and the opinions and customs of ages.

In respect to self-esteem, he has more of that portion of it that gives dignity and manliness than of that which imparts a dictatorial, domineering spirit. In early life he was inclined to defer to others, to shrink from responsibility, to feel that others could do more and better than he; at the same time he had no lack of personal self-respect. That part of self-esteem that produces the dictating spirit, and the disposition to take responsibility, has been developed along with firmness, and doubtless from the same cause and course of life.

His conscientiousness is very large, and particularly so in the outer part of it, joining cautiousness, which gives him moral circumspection, carefulness to do right, as well as to entertain just principles; hence he feels its binding force just as much in the details of life, in the practical duties of the day, as in respect to fundamental moral principles; hence the law of expediency, as such, when brought in conflict with the law of right, becomes nugatory.

His hope stretches forward prophetically,—he works for the future. He hopes for little in the present, except that which he, by dint of care and effort, can bring to pass; and he is less inclined to trust his business or interests in other hands than most men. He feels that he must be in his affairs personally, and have an eye over and a hand in the matter, or it will in some way go wrong. His hope inspires to effort, but not to expect success from luck, chance, or fortune, without labor and vigilance. He is not a man to lie quietly on the sunny side of present prosperity, expecting that "to-morrow shall be as this day, and much more abundant," but to plow and sow, in the storm if need be; yet he looks confidently for the harvest, however remote it may be. This is as true of him in morals as in business.

He has not a high degree of credulity. That part of the organ of marvelousness or spirituality which most influences his character, is the inner or higher part of it, which gives spiritual or religious faith, reliance upon truth and first principles; and, although he is radical and progressive, he is by no means credulous. His mind is very critical, and rather skeptical, so much so that he takes little upon trust, and feels impelled to a thorough, rigid examination of whatever may be presented for his adoption; nor is his large causality satisfied with any thing short of this, for it leads him to seek "a base line" for every thing in business, in propositions, or in morals, as well as in mathematics.

Imitation and agreeableness are large, which give him the power of mental

assimilation and harmony. He can reconcile apparently discordant things, or meet those who think differently from himself, without making manifest, in a high degree, the real difference that may exist between them, and he will so far conform to an opponent as not to seem in opposition, until, by asking questions and quoting particulars, he can show good reasons for a counter belief thus, and lead his adversary into his own mode of thought.

He has the organ called human nature large, which leads him instinctively to the study of mind, whether appertaining to men, to childhood, or to animals. He sees at a glance the general drift of a man's intellect and character; is strongly impressed with the truth of those inferences, and acts upon them, and generally with safety. If he takes a dislike to, or forms a favorable opinion of, a stranger at first sight, subsequent acquaintance generally corroborates the judgment thus formed; hence, as a teacher, as a lawyer, or as a trader, he would, as it were, recognize a man's mental sphere, and know what to say to impress a sentiment or exert a given influence upon his mind. This faculty, joined with agreeableness or suavitiveness, enables him to make palatable, and accepted without hesitation, truths which, uttered harshly and in disregard of the tone of mind of the one addressed, would be at once rejected.

Intellectually, he has some peculiarities. His reasoning organs are greatly superior to his percepts and memory. He has a remarkably critical and logical cast of mind. He has the power to sift, dissect, and essay propositions and principles with great celerity and exactitude, while his large causality enables him to see the propriety and logical congruity of facts and propositions, and to present those views to others in a clear, concise, and forcible manner. In juxtaposition with causality he has very large mirthfulness, which gives him equal facility to recognize and show up whatever is incongruous, ridiculous, or witty, in such contrast with truth and propriety as not only to amuse the mind of the hearer, but to brand error and immortalize truth.

His faculties of memory and perception are doubtless active, appertaining as they do to such an active temperament, and because his sentiments and his reasoning intellect urge them to effort, to furnish data on which the higher mental forces may act. He finds it necessary to trust to memoranda for facts and statistics, but when thus obtained, he knows well how to work them up into arguments. His mind has much more to do with principles and elements than with facts, hence he is much more a philosopher than a historian.

His language, instead of being copious, has this peculiar quality, viz., precision, nice distinction, and ready appreciation of synonyms; and, in speaking or writing, his faculty of tune, in connection with language and ideality, leads him to seek euphony of expression, and a smooth, mellifluous style; and in this combination, with mirthfulness, ideality, and agreeableness added, consists his power of expressing stern, cutting truth, in a poetical and pleasing manner.

It requires more effort for him than for most men to individualize his ideas, and to concentrate his powers on a given mental effort. He wants time and quiet, and a convenient opportunity. He can never bring out his full power of thought on a subject instantaneously. He must survey the whole ground, and converge his mind upon it logically; hence, in off-hand, extemporaneous speaking, he rarely does himself or his subject full justice.

In moral and social dispositions he is strongly developed, and bears the marks of special resemblance to his mother. He has large adhesiveness, which makes him eminently friendly. The upper part of philoprogenitiveness is large, which leads him to regard the moral and intellectual good of children much more than to look upon them as mere pets and playthings; and he rarely plays with children without holding virtue, intelligence, and morality up to them as the goal of their hopes and efforts; hence he seldom flatters them, or ministers to their animal gratification. His love for female society is strong, yet delicate, and he is much more interested in woman as relates to her refinement, and elevation, and purity of character, than passionately.

The home, the family, and its elevated endearments, is the scene of his highest hopes and fondest attachments.

REMARKS

AT THE DEDICATION OF THE STATE NORMAL SCHOOL-HOUSE
AT BRIDGEWATER.

August 19, 1846.

THE completion of a new edifice to accommodate the State Normal School at Bridgewater was signalized by appropriate exercises, on the 19th of August, 1846. Addresses were made during the day by His Excellency, Governor Briggs, Hon. William G. Bates, of Westfield, Amasa Walker, Esq., of Brookfield, at the church, and in the new school-room. After these addresses the company partook of a collation in the Town Hall, on which occasion the health of the Secretary of the Board of Education was given by the president of the day, and received by the company with enthusiastic applause. To this sentiment Mr. Mann responded as follows, as reported in the Boston Mercantile Journal.

Mr. President: Among all the lights and shadows that have ever crossed my path, this day's radiance is the brightest. Two years ago, I would have been willing to compromise for ten years' work, as hard as any I had ever performed, to have been insured that, at the end of that period, I should see what our eyes this day behold. We now witness the completion of a new and beautiful Normal School-house for the State Normal School at Bridgewater. One fortnight from to-morrow, another house, as beautiful as this, is to be dedicated at Westfield, for the State Normal School at that place. West Newton was already provided for by private munificence. Each Normal School then will occupy a house, neat, commodious, and well adapted to its wants; and the Principals of the schools will be relieved from the annoyance of keeping a Normal School in an *ad-hoc* Normal house.

I shall not even advert to the painful causes which have hastened this most desirable consummation,—since what was meant for evil has resulted in so much good. Let me, however, say to you, as the moral of this result, that it strengthens in my own mind what I have always felt; and I hope it will strengthen, or create, in all *your* minds, a repugnance to that sickly and cowardly sentiment of the poet, which made him long

“For a lodge in some vast wilderness,
Some boundless contiguity of shade,
Where rumor of oppression and deceit,
Of unsuccessful or successful wars,
Might never reach him more.”

There is oppression in the world which almost crushes the life out of humanity. There is deceit, which not only ensnares the unwary, but almost abolishes the security, and confidence, and delight, which rational and social beings ought to enjoy in their intercourse with each other. There are wars, and the question whether they are right or wrong tortures the good man a thousand times more than any successes or defeats of either belligerent. But the feeling which springs up spontaneously in my mind, and which I hope springs up spontaneously in your minds, my friends, in view of the errors, and calamities, and iniquities of the race, is, *not* to flee from the world, but to remain in it; *not* to hie away to forest solitudes or hermit cells, but to confront selfishness, and wickedness, and ignorance, at whatever personal peril, and to subdue and extirpate them, or to die in the attempt. Had it not been for a feeling like this among your friends, and the friends of the sacred cause of education in which you have enlisted, you well know that the Normal Schools of Massachusetts would have been put down, and that this day never would have shone to gladden our hearts and to reward our

toils and sacrifices. Let no man who knows not what has been suffered, what has been borne and forborne, to bring to pass the present event, accuse me of an extravagance of joy.

Mr. President, I consider this event as marking an era in the progress of education,—which, as we all know, is the progress of civilization,—on this western continent and throughout the world. It is the completion of the first Normal School-house ever erected in Massachusetts,—in the Union,—in this hemisphere. It belongs to that class of events which may happen once, but are incapable of being repeated.

I believe Normal Schools to be a new instrumentality in the advancement of the race. I believe that, without them, Free Schools themselves would be shorn of their strength and their healing power, and would at length become mere charity schools, and thus die out in fact and in form. Neither the art of printing, nor the trial by jury, nor a free press, nor free suffrage, can long exist, to any beneficial and salutary purpose, without schools for the training of teachers; for, if the character and qualifications of teachers be allowed to degenerate, the Free Schools will become pauper schools, and the pauper schools will produce pauper souls, and the free press will become a false and licentious press, and ignorant voters will become venal voters, and through the medium and guise of republican forms, an oligarchy of profligate and flagitious men will govern the land; nay, the universal diffusion and ultimate triumph of all-glorious Christianity itself must await the time when knowledge shall be diffused among men through the instrumentality of good schools. Coiled up in this institution, as in a spring, there is a vigor whose uncoiling may wheel the spheres.

But this occasion brings to mind the past history of these schools, not less than it awakens our hopes and convinces our judgment respecting their future success.

I hold, sir, in my hand, a paper, which contains the origin, the source, the *punctum saliens*, of the Normal Schools of Massachusetts. [Here Mr. Mann read a note from the Hon. Edmund Dwight, dated March 10th, 1833, authorizing him. Mr. Mann, to say to the Legislature, that the sum of ten thousand dollars would be given by an individual for the preparation of teachers of Common Schools, provided the Legislature would give an equal sum. The reading was received with great applause.]

It will be observed, resumed Mr. Mann, that this note refers to a conversation held on the evening previous to its date. The time, the spot, the words of that conversation can never be erased from my soul. This day, triumphant over the past, auspicious for the future, then rose to my sight. By the auroral light of hope, I saw company after company go forth from the bosom of these institutions, like angel ministers, to spread abroad, over waste spiritual realms, the power of knowledge and the delights of virtue. Thank God, the enemies who have since risen up to oppose and malign us, did not cast their hideous shadows across that beautiful scene.

The proposition made to the Legislature was accepted, almost without opposition, in both branches; and on the third day of July, 1839, the first Normal School, consisting of only *three* pupils, was opened at Lexington, under the care of a gentleman who now sits before me,—Mr. Cyrus Pierce, of Nantucket,—then of island, but now of continental fame.

[This called forth great cheering, and Mr. Mann said he should sit down to give Mr. Pierce an opportunity to respond. Mr. Pierce arose under great embarrassment; starting at the sound of his name, and half doubting whether the eloquent Secretary had not intended to name some other person. He soon recovered, however, and in a very happy manner extricated himself from the "fix" in which the Secretary had placed him. He spoke of his children, the pupils of the first Normal School, and of the honorable competition which ought to exist between the several schools; and to the surprise, as well as regret, of all who heard him, he spoke of being admonished by infirmities which he could not mistake, that it was time for him to retire from the profession. The audience felt as if, for once in his life, this excellent teacher had threatened to do wrong. He then told an amusing anecdote of a professor who retained his office too long, and was teased by the students in the words of Dr. Watts—"The Rev. Dr. —, Hush, my babe, lie still and slumber." And then he sat down amidst the sincere plaudits of the company, who seemed to think he was not "so plaguy old" as he wished to appear.]

I say, said Mr. Mann, on resuming, that, though the average number of Mr. Pierce's school is now from sixty to eighty; and though this school, at the present term, consists of one hundred pupils, yet the first term of the first school opened with *three* pupils only. The truth is, though it may seem a paradox to

say so, the Normal Schools had to come to prepare a way for themselves, and to show, by practical demonstration, what they were able to accomplish. Like Christianity itself, had they waited till the world at large called for them, or was ready to receive them, they would never have come.

In September, 1839, two other Normal Schools were established: one at Barre, in the county of Worcester, since removed to Westfield, in the county of Hampden; and the other at this place, whose only removal has been a constant moving onward and upward, to higher and higher degrees of prosperity and usefulness.

In tracing down the history of these schools to the present time, I prefer to bring into view, rather the agencies that have helped, than the obstacles which have opposed them.

I say, then, that I believe Massachusetts to have been the only State in the Union where Normal Schools could have been established; or where, if established, they would have been allowed to continue. At the time they were established, five or six thousand teachers were annually engaged in our Common Schools; and probably nearly as many more were looking forward to the same occupation. These incumbents and expectants, together with their families and circles of relatives and acquaintances, would probably have constituted the greater portion of active influence on school affairs in the State; and had they, as a body, yielded to the invidious appeals that were made to them by a few agents and emissaries of evil, they might have extinguished the Normal Schools, as a whirlwind puts out a taper. I honor the great body of Common School teachers in Massachusetts for the magnanimity they have displayed on this subject. I know that many of them have said, almost in so many words, and, what is nobler, they have acted as they have said:—"We are conscious of our deficiencies; we are grateful for any means that will supply them,—nay, we are ready to retire from our places when better teachers can be found to fill them. We derive, it is true, our daily bread from school-keeping, but it is better that our bodies should be pinched with hunger than that the souls of children should starve for want of mental nourishment; and we should be unworthy of the husks which the swine do eat, if we could prefer our own emolument or comfort to the intellectual and moral culture of the rising generation. We give you our hand and our heart for the glorious work of improving the schools of Massachusetts, while we scorn the baseness of the men who would appeal to our love of gain, or of ease, to seduce us from the path of duty." This statement does no more than justice to the noble conduct of the great body of teachers in Massachusetts. To be sure, there always have been some who have opposed the Normal Schools, and who will, probably, continue to oppose them as long as they live, lest they themselves should be superseded by a class of competent teachers. These are they who would arrest education where it is; because they cannot keep up with it, or overtake it in its onward progress. But the wheels of education are rolling on, and they who will not go with them must go under them.

The Normal Schools were supposed by some to stand in an antagonistic relation to academies and select schools; and some teachers of academies and select schools have opposed them. They declare that they can make as good teachers as Normal Schools can. But, sir, academies and select schools have existed in this State, in great numbers, for more than half a century. A generation of school-teachers does not last, at the extent, more than three or four years; so that a dozen generations of teachers have passed through our Public Schools within the last fifty years. Now, if the academies and high schools can supply an adequate number of school-teachers, why have they not done it? We have waited half a century for them. Let them not complain of us, because we are unwilling to wait half a century more. Academies are good in their place; colleges are good in their place. Both have done invaluable service to the cause of education. The standard of intelligence is vastly higher now than it would have been without their aid; but they have not provided a sufficiency of competent teachers; and if they perform their appropriate duties hereafter, as they have done heretofore, they cannot supply them; and I cannot forbear, Mr. President, to express my firm conviction, that if the work is to be left in their hands, we never can have a supply of competent teachers for our Common Schools, without a perpetual Pentecost of miraculous endowments.

But if any teacher of an academy had a right to be jealous of the Normal Schools, it was a gentleman now before me, who, at the time when the Bridgewater Normal School came into his town, and planted itself by the path which led to his door, and offered to teach gratuitously such of the young men and women attending his school, as had proposed to become teachers of Common Schools, instead of opposing it, acted with a high and magnanimous regard to the great interests of humanity. So far from opposing, he gave his voice, his vote, and his purse, for the establishment of the school, whose benefits, you, my young friends, have since enjoyed. (Great applause.) Don't applaud yet, said Mr. Mann, for I have better things to tell of him than this. In the winter session of the Legislature of 1840, it is well known that a powerful attack was made, in the House of Representatives, upon the Board of Education, the Normal Schools, and all the improvements which had then been commenced, and which have since produced such beneficent and abundant fruits. It was proposed to abolish the Board of Education, and to go back to the condition of things in 1837. It was proposed to abolish the Normal Schools, and to throw back with indignity, into the hands of Mr. Dwight, the money he had given for their support.

That attack combined all the elements of opposition which selfishness and intolerance had created,—whether latent or patent. It availed itself of the argument of expense. It appealed invidiously to the pride of teachers. It menaced Prussian despotism as the natural consequence of imitating Prussia in preparing teachers for schools. It fomented political partisanship. It invoked religious bigotry. It united them all into one phalanx, animated by various motives, but intent upon a single object. The gentleman to whom I have referred was then a member of the House of Representatives, and Chairman of the Committee on Education, and he, in company with Mr. Thomas A. Greene, of New Bedford, made a minority report, and during the debate which followed, he defended the Board of Education so ably, and vindicated the necessity of Normal Schools and other improvements so convincingly, that their adversaries were foiled, and these institutions were saved. The gentleman to whom I refer is the Hon. JOHN A. SHAW, now Superintendent of schools in New Orleans.

[Prolonged cheers:—and the pause made by Mr. Mann, afforded an opportunity to Mr. Shaw, in his modest and unpretending manner, to disclaim the active and efficient agency which he had had in rescuing the Normal Schools from destruction before they had had an opportunity to commend themselves to the public by their works:—but all this only increased the animation of the company, who appeared never before to have had a chance to pay off any portion of their debt of gratitude. After silence was restored, Mr. Shaw said that every passing year enforced upon him the lesson of the importance and value of experience in school-keeping. Long as he had taught, he felt himself improved by the teachings of observation and practice; and he must therefore express his joy and gratitude at the establishment and the prosperity of the school at that place, whatever might be the personal consequences to himself.]

Nor, continued Mr. Mann, is this the only instance of noble and generous conduct which we are bound this day to acknowledge. I see before me a gentleman who, though occupying a station in the educational world far above any of the calamities or the vicissitudes that can befall the Common Schools,—though, pecuniarily considered, it is a matter of entire indifference to him whether the Common Schools flourish or decline,—yet, from the beginning, and especially in the crisis to which I have just adverted, came to our rescue, and gave all his influence, as a citizen and as a teacher, to the promotion of our cause; and whom those who may resort hither, from year to year, so long as this building shall stand, will have occasion to remember, not only with warm emotions of the heart, but, during the wintry season of the year, with warm sensations of the body also.* I refer to Mr. GEO. B. EMERSON.

[Mr. Emerson was now warmly cheered, until he rose, and in a heartfelt address of a few moments, expressed his interest in the school, and in the cause of education, which he begged the young teachers not to consider as limited to this imperfect stage of our being.]

These, said Mr. Mann, are some of the incidents of our early history. The late events which have resulted in the generous donations of individuals, and in the patronage of the Legislature, for the erection of this, and another edifice at Westfield, as a residence and a home for the Normal Schools,—these events, I shall

* Mr. Emerson has furnished, at his own expense, the furnace by which the new school-house is to be warmed.

consult my own feelings, and perhaps I may add, the dignity and forbearance which belong to a day of triumph, in passing by without remark.

[This part of the history, however, was not allowed to be lost. As soon as the Secretary had taken his seat, the Rev. Mr. Waterston, who had been instrumental in getting up the subscription to erect the two school-houses, arose, and eloquently completed the history. He stated, in brief, that the idea of providing suitable buildings for the Normal Schools originated with some thirty or forty friends of popular education, who, without distinction of sect or party, had met, in Boston, in the winter of 1844-5, to express their sympathy with Mr. Mann in the vexatious conflict which he had so successfully maintained; and who desired, in some suitable way, to express their approbation of his course in the conduct of the great and difficult work of reforming our Common Schools. At this meeting, it was at first proposed to bestow upon Mr. Mann some token evincive of the personal and public regard of its members; but, at a subsequent meeting, it was suggested that it would be far more grateful and acceptable to him to furnish some substantial and efficient aid in carrying forward the great work in which he had engaged, and in removing those obstacles and hinderances both to his own success and to the progress of the cause, which nothing but an expenditure of money could effect. No way seemed so well adapted to this purpose as the placing of the Normal Schools upon a firm and lasting basis, by furnishing them with suitable and permanent buildings; and the persons present thereupon pledged themselves to furnish \$5000, and to ask the Legislature to furnish a like sum for this important purpose. The grant was cheerfully made by the Legislature, whose good-will has since been further expressed by a liberal grant, to meet the expenses of those temporary Normal Schools, called Teachers' Institutes. Mr. Mann, who had not yet taken his seat, then continued as follows:]

I have, my young friends, former and present pupils of the school, but a single word more to say to you on this occasion. It is a word of caution and admonition. You have enjoyed, or are enjoying, advantages superior to most of those engaged in our Common Schools. Never pride yourselves upon these advantages. Think of them often, but always as motives to greater diligence and exertion, not as points of superiority. As you go forth, after having enjoyed the bounty of the State, you will probably be subjected to a rigid examination. Submit to it without complaint. More will sometimes be demanded of you than is reasonable. Bear it meekly, and exhaust your time and strength in performing your duties, rather than in vindicating your rights. Be silent, even when you are misrepresented. Turn aside when opposed, rather than confront opposition with resistance. Bear and forbear, not defending yourselves, so much as trusting to your works to defend you. Yet, in counseling you thus, I would not be understood to be a total non-resistant,—a perfectly passive, non-elastic sand-bag, in society; but I would not have you resist until the blow be aimed, not so much at you, as, through you, at the sacred cause of human improvement, in which you are engaged,—a point at which forbearance would be allied to crime.

To the young ladies who are here—teachers and those who are preparing themselves to become teachers,—I would say, that, if there be any human being whom I ever envied, it is they. As I have seen them go, day after day, and month after month, with inexhaustible cheerfulness and gentleness, to their obscure, unobserved, and I might almost say, unrequited labors, I have thought that I would rather fill their place, than be one in the proudest triumphal procession that ever received the acclamations of a city, though I myself were the crowned victor of the ceremonies. May heaven forgive them for the only sin which, as I hope, they ever commit,—that of tempting me to break the commandment, by coveting the blissfulness and purity of their quiet and secluded virtues.

LIST OF PUBLICATIONS BY HORACE MANN, LL.D.

THE COMMON SCHOOL JOURNAL. 1839—1848. 10 vols., royal octavo.

ABSTRACT OF MASSACHUSETTS SCHOOL RETURNS. 1839—1847.

ANNUAL REPORTS (TWELVE,) AS SECRETARY OF THE BOARD OF EDUCATION, from 1838 to 1849.

SUPPLEMENTARY REPORT ON SCHOOL-HOUSES. 1838.

MASSACHUSETTS SYSTEM OF COMMON SCHOOLS; being an enlarged and revised edition of the Tenth Annual Report. 1849. pp. 212.

LECTURES ON EDUCATION. 1845. pp. 338.

AN ORATION, DELIVERED BEFORE THE AUTHORITIES OF THE CITY OF BOSTON. July 4, 1842. pp. 86.

A FEW THOUGHTS FOR A YOUNG MAN; a Lecture, delivered before the Boston Mercantile Library Association, on its Twenty-ninth Anniversary. 1850. pp. 84.

A FEW THOUGHTS ON THE POWERS OF WOMEN. Two Lectures. 1853. pp. 141.

DEDICATION OF ANTIOCH COLLEGE, AND INAUGURAL ADDRESS OF ITS PRESIDENT. 1854. pp. 144.

BACCALAUREATE, DELIVERED AT ANTIOCH COLLEGE. 1857. pp. 61.

DEMANDS OF THE AGE ON COLLEGES. Speech delivered before the Christian Convention, Ohio. October 5, 1854. pp. 86.

We give below the titles of the pamphlets which we have had bound together and lettered "*Mann's Educational Controversies.*"

THE COMMON SCHOOL CONTROVERSY; consisting of three Letters of the Secretary of the Board of Education, in reply to charges preferred against the Board, with extracts from the daily press, in regard to the controversy. 56 pages.

SEVENTH ANNUAL REPORT OF THE SECRETARY OF THE BOARD OF EDUCATION. (By Horace Mann.) January 1, 1844. pp. 188.

Remarks on the Seventh Annual Report of the Hon. Horace Mann, Secretary of the Massachusetts Board of Education. By Thirty-one Boston Teachers. 1844. pp. 144.

Reply to the "Remarks" of Thirty-one Boston Schoolmasters, on the Seventh Annual Report of the Secretary of the Massachusetts Board of Education. By Horace Mann. 1844. pp. 176.

Rejoinder to the "Reply" of the Hon. Horace Mann, Secretary of the Massachusetts Board of Education to the "Remarks" of the Association of Boston Masters, upon his Seventh Annual Report. 1845. By the "Thirty-one Schoolmasters." pp. 55.

Rejoinder to the Second Section of the "Reply." By Wm. A. Shepard. March, 1845. pp. 56.

Rejoinder to the Third Section of the "Reply." By S. S. Greene. March, 1845. pp. 40.

Rejoinder to the Fourth Section of the "Reply." By Joseph Hale. April, 1845. pp. 64.

Answer to the "Rejoinder" of "Twenty-nine" Boston Schoolmasters, part of the "Thirty-one" who published "Remarks" on the Seventh Annual Report of the Secretary of the Massachusetts Board of Education. By Horace Mann. 1845. pp. 124.

Penitential Tears; or a Cry from the Dust. By "the Thirty-one," prostrated and pulverized by the Hand of Horace Mann, Secretary of the Massachusetts Board of Education. 1845. pp. 59.

"Penitential Tears!" By Massachusetts.

Observations on a pamphlet, entitled "Remarks on the Seventh Annual Report of the Hon. Horace Mann, Secretary of the Massachusetts Board of Education." By G. B. Emerson. pp. 16.

Mr. Bumstead's Defense of his School-books, in reply to Mr. S. S. Greene. July, 1845. pp. 8.

Report of the Special Committee of the Primary School Board, on a portion of the Remarks of the Grammar Masters. Boston: 1844. pp. 13.

Report of a Committee of the Association of Masters of the Boston Public Schools, on a letter from Dr. John Odin, in relation to a Report of the Special Committee of the Primary School Board. Boston: 1845. pp. 18.

School Discipline. By Anti-Busby.

The Schoolmasters' Review of Mr. Mann's Report. By Luther.

REPORTS OF THE ANNUAL VISITING COMMITTEES, OF THE PUBLIC SCHOOLS OF THE CITY OF BOSTON. 1845. pp. 168.

Review of the Reports of the Annual Visiting Committees, of the Public Schools of the City of Boston, 1845. By Scholiast. pp. 58.

The Scholiast Schooled. An Examination of the Review of the Reports of the Annual Visiting Committees of the Public Schools of the City of Boston, for 1845, by Scholiast. By A Bostonian. 1846. pp. 65.

Address to the Citizens of Boston. By S. G. Howe, William Brigham, J. L. T. Coolidge, and Theophilus Parsons. March, 1846. pp. 12.

THE BIBLE, THE ROD, AND RELIGION, IN COMMON SCHOOLS. The Ark of God on a new cart: A Sermon, by the Rev. Matthew Hale Smith. A Review of the Sermon, by Wm. B. Fowle, publisher of the Massachusetts Common School Journal. Strictures on the Sectarian Character of the Common School Journal, by a Member of the Massachusetts Board of Education. Correspondence between the Hon. Horace Mann, Secretary of the Board of Education, and Rev. Matthew Hale Smith. Boston: 1847. pp. 59.

Sequel to the so-called Correspondence between the Rev. Matthew Hale Smith and Horace Mann, surreptitiously published by Mr. Smith; containing a letter from Mr. Mann, suppressed by Mr. Smith, with the reply therein promised. Boston: 1847. pp. 56.

Reply to the Sequel of Hon. Horace Mann; being a supplement to the Bible, the Rod, and Religion, in Common Schools. By Matthew Hale Smith. Second edition. Boston: 1847. pp. 36.

Letter to the Rev. Matthew Hale Smith, in an answer to his "Reply" or "Supplement." By Horace Mann. Boston: 1847. pp. 22.

Horace Mann and Matthew Hale Smith. April 30, 1847. pp. 8.

MEMORIAL

OF THE

DIRECTORS OF THE AMERICAN INSTITUTE OF INSTRUCTION.

TO THE HONORABLE THE LEGISLATURE
OF THE COMMONWEALTH OF MASSACHUSETTS.

THE directors of the American Institute of Instruction beg leave to present their memorial, praying them to consider the expediency of appointing, for a term of years, a superintendent of the common schools of the Commonwealth.

And, in presenting this memorial, the directors of the Institute beg leave to state some of the circumstances and reasons which have led them to feel the importance and necessity of such an officer, and which have determined them to offer to the legislature the request which they now lay before them.

Of their impression of the immeasurable value of the free schools of the Commonwealth, as an instrument of good to its citizens, your memorialists hold it unnecessary to speak at large. They confidently believe that upon the importance of an institution which, in its action, comes home to the mind and heart of every child of the Commonwealth, which does, or may do, more than any other to bring out his powers, to furnish him with good knowledge, to form his character, to give him noble aims, and to fit him in all ways for his duties as a citizen and a man, and for his whole future existence, any statements they could make would alike fall far short of the truth, and of the convictions of the wise and patriotic citizens who represent the people of the state. They believe that in no way can so much be done to benefit the whole population of the Commonwealth, as by improving the condition of the common schools. They believe, and have long believed, that in many respects these schools need improvement.

One of the objects had in view in the formation of the American Institute of Instruction, was to reach these schools, through their teachers. If these could be brought together, even once in a year, or once in a few years, it was confidently hoped that they could not fail of receiving an useful impulse. And your memorialists trust that some good has in this way been done. Their hopes have not been entirely disappointed, their exertions have not been altogether unavailing.

A few, out of the great number of teachers in the Commonwealth, have annually met together, and stimulated and encouraged each other, and made report, and borne testimony of a gradual and partial improvement.

They have annually reported much, however, of a different complexion. They have reported, with unlaughing unanimity, and we fear that every member of the legislature, acquainted with any considerable portion of the schools, must confirm the truth of their report, that very many of the common schools, in all parts of the Commonwealth, have yet felt no impulse, have made no advancement, have undergone no change. The very schools which most need, and which should most feel, the fostering care of benevolent attention, those in every county, situated in the remote, and poor, and thinly-peopled districts, remain unimproved, and apparently unregarded.

We believe that the buds of genius are scattered as bountifully in these remote districts as elsewhere; that on the rough hills, and among the sterile fields, the noblest of plants, the human soul, springs with as divine capacities, and, if kindly and skillfully nurtured, will expand with as large and vigorous a growth, as in any of the most favored region; nay more, that the very absence of the softnesses and luxuries of life, will give an inward vigor and sturdiness, most favorable to the highest talents and the best virtues. But a kindly nurture they require. Good schools they must have. How shall these schools be reached?

The Institute can not reach them, it can not visit them. We have not sufficiently exact information in regard to their condition, to enable us to communicate with them, in such manner as to be sure to benefit them. Their teachers can not visit us. They do not meet with our Institute, or with any institute or association, nor are they subject to any influence which shall awaken them to greater zeal, or give them better knowledge in regard to education.

They are so numerous and remote, that the whole time of one individual would be no more than sufficient to obtain a knowledge of their state and wants; and, without this knowledge, nothing can be wisely suggested, or satisfactorily done to improve them.

What we see ought to be done, what we want the knowledge and ability to do, we come to pray the legislature to cause to be done.

We can not for a moment doubt that the legislature is entirely disposed to do whatever can be done for the common schools. We dare not impute to them the inconsistency of making a liberal provision for the development of the material resources of the state, in its mineral and vegetable treasures, and yet remaining indifferent to the infinitely greater treasures, the whole intellectual and moral resources of its future population; we are not willing to believe that the state will do more to bring to light the marble and granite of its hills, than the genius of its children.

There is a very general conviction that something more should be done for the common schools; and we believe that a chief reason why so little has hitherto been done is, that the information essential to a wise action upon the subject has not been collected and presented in a strong light to the legislature and the public.

We believe that an individual, competent to this work, and faithfully devoted to it, under the direction of the executive, or any other authority the legislature might see fit, in its wisdom, to appoint, would be able to collect information in regard to the schools, and lay it, in an annual report, before the legislature, which would enable them to act with complete knowledge of the whole subject.

We, therefore, think that the condition of the schools demands the appointment of the superintendent.

And we beg leave further to state, particularly, some of the ways in which such an officer, if appointed, could act directly for the good of the schools.

1. He could devise means for the improvement of the teachers. We hold it an evident and important truth, that no school can be essentially improved, but by the improvement of its teacher. All other things are, in comparison, of very little consequence. Children of the best parents, in the best constructed school-house, under the most favorable circumstances, will lose, and more than lose, their time, if given over to the management of an incompetent teacher. This improvement is, therefore, at the bottom of every other. Now there are various ways in which a superintendent could minister to this. By calling conventions of teachers in the different counties, he would awaken an interest which could not fail of doing good.

There are, we trust, no sections of the state, in which there are not to be found excellent schools, managed by skillful and abundantly capable teachers. But they are now isolated. They act little on each other, and still less on the numerous schools about them. The improvements that are made by individuals, in arrangement, in discipline, in the choice of things to be taught, and in the modes of teaching, are not indeed lost, for they act on the immortal minds within the influence of him who makes them. But they are usually confined to his immediate sphere; they go not abroad, to stimulate and enlighten his fellow-workers in the same cause; they are not recorded for the benefit of his successors; they cease with their author. If what is best in each, could be added to the common stock of all, all would become respectable; and such a communication, long continued, would at length render all, who were capable of it, excellent. But such a system can only be begun, and successfully continued, by the influence of some common friend.

A superintendent, visiting all the schools, would find many instructors, of good capacities, failing for want of experience, and the knowledge of various methods. To such, how often would a few suggestions be of the greatest advantage.

2. He could devise means for the formation of better teachers. It is well known that a large portion of the schools are taught by persons who have recourse to instruction for a temporary employment, in the intervals of other pursuits, or while in preparation for another calling, without especial taste or suitability for the vocation. In some degree, it will probably be always so; it is to be hoped, in a far less degree hereafter than at present. If the schools

of the Commonwealth are ever to be what they might be, it can only happen by the separation to the work of instruction of men of peculiar gifts, to be trained and prepared for it by a special course, as men are now prepared for all other professions and all other arts. On this subject, which we shall not trust ourselves to enlarge upon, the suggestions of one intimately acquainted with all the circumstances of the schools of the Commonwealth, would have peculiar value.

3. He could furnish useful information upon the position, construction, and furniture of school-houses. This is a matter commonly referred to committees, who, however competent in other respects, have usually had little experience as to buildings of this sort, and few opportunities of seeing improved modes of structure, and who would gladly obtain hints, to assist them in the proper discharge of their commission. How valuable to such a committee would be the advice and the portfolio of a man who had seen all the best school-houses, and had prepared plans of them, and was familiar with the inconveniences and advantages of the various models.

4. He could recommend ways and means by which the schools may be encouraged. Their prosperity will always depend, in a great measure, upon the attention given to them; and nothing can be so fatal, as neglect and indifference. But there is always danger, that direct encouragement to schools, by donations of money, shall make their friends overconfident in regard to them, and thus lead them to relax or draw off their attention. Great care must evidently be necessary, so to bestow the public bounty as to increase the interest taken in them, by those immediate friends on whose personal care they must still depend for every thing most vital about them. It would seem prudent, in the prospect of having large sums annually to disburse for the furtherance of this dearest interest of the people, that an agent should be employed by the legislature, to enable them the better to judge whether the bounty of the state were or were not producing the good intended.

5. He could reduce to shape and symmetry, the now disjointed materials of what might be a beautiful system. Much is said of our system of schools. But it is evident, there is little of system about them. They are of all grades of excellence, and, from their absolute independence, of every variety of form, or fabric, that reason or fancy could frame. This would be of less consequence, if the same teachers usually remained, for a series of years, in the same schools. But, in this respect, there is continual change, and a teacher, who has become accustomed to a certain order of things, as to discipline, arrangement, studies, and text-books, is very often condemned to waste his own time, and that of his pupils, by passing to another school, of an order, in all these particulars, entirely different. The want of some superintending and regulating authority is, we fear, grievously felt, in the greater number of the common schools. There is now no concert of action; and, from the nature of the case, there can be none, without the direct or indirect interference of the legislature, through their authorized agent.

6. He could collect, and present to the legislature, the experience of other states, and foreign countries, on subjects interesting to the common schools. The peculiar position of the American Republic, in reference to foreign nations, at once remote by its situation and near by its relations, has enabled it to avail itself of the improvements in the arts and sciences of all the world; and, in a single half century, to place itself, in these respects, among the foremost of the earth. It is to be hoped that Massachusetts, at least, will not be less wary to take advantage of its situation, in reference to the essential interests of education.

Several of the states of Germany have, with wise policy, put into operation systems for the complete education of all their inhabitants. The government of France is, at this moment, earnestly engaged in the same work. No doubt, it is from a conviction that the essential welfare of a state mainly depends on the education of its citizens, that the government of these nations, some of them almost unlimited monarchies, have adopted a course which would seem to belong especially to republics. They have felt that, from the great onward movement that the common mind of Europe has made, in this long interval of peace, they could not hold their place in the family of nations, but by putting forth all their energies; and that those energies could only be brought out by the action of a system

of national instruction in the common schools. Their experience is now before us.

7. From a knowledge of the condition and wants of the agricultural population of the state, a superintendent of the common schools could do much toward enabling the legislature to determine the question, whether any thing can be done, better to adapt the instruction given in the common schools to those wants, or whether separate institutions for that purpose may, with advantage, be established.

From a similar knowledge of the manufacturing population, he could suggest improvements, if any are to be made, in the schools specially intended for that population.

Lastly, his knowledge of the whole system would enable him to recommend improvements, where practicable, of a general nature. Can further instruction in the useful arts be introduced into all the schools? Can a higher moral influence be exercised; thus to do something more to prevent the crimes which it now costs the state so much to punish? Can any thing be done to instruct youth in their rights and duties as citizens; thus adapting, more particularly to the wants of the future freemen, schools formed after the model of those intended for the subjects of a monarchy?

Your memorialists trust that they have said enough, to show that the general charge of the oversight of the common schools of the Commonwealth would afford abundant employment to an individual of the most eminent abilities, whatever energy, activity, and devotion he might bring to the office.

They believe that the schools, and, through them, the whole population of the state, would be benefited by the appointment of a competent superintendent; and, moreover, that the good effected would be greater, in proportion, if he should act on a system to be extended through several years, than if the experiment were to be confined to a single year.

To show that they do not give undue prominence to this office, they beg leave to refer to the example of Russia, Prussia, France, and several others of the most enlightened governments of Europe, in which the charge of public instruction constitutes a separate department, equal, in rank and consequence, to any other whatever. All these states we have long looked upon as friends. Even if they were our enemies, it would still be wise in us to borrow from them an institution, which promised to be as useful among us as it showed itself among them. That proudest nation of antiquity, which extended its arms and its laws to the limits of the known world, never disdained to adopt, from a conquered nation, whatever custom or art it found superior to its own.

Moved by these considerations, your memorialists respectfully pray you to consider the expediency of appointing, for a term of years, a superintendent of the common schools of the Commonwealth.

For the Directors of the American Institute of Instruction.

GEORGE B. EMERSON,	} Committee.
S. R. HALL,	
E. A. ANDREWS.	

II. VERBAL REALISM.

[Translated for the American Journal of Education, from the German of Karl von Raumer.]

Thus we perceive that the circle of studies, both at the schools and universities of that period (the sixteenth century, and thereabouts,) was extremely limited, compared with that of the present day. It is abundantly evident, as I have repeatedly remarked, that all the time and energy of youth was devoted to the acquisition and the practice of Latin eloquence. A many-years' course in grammar was submitted to for the sake of correctness of speech, in logic for the sake of precision of thought; and history was taught in order to furnish the material for the display of rhetoric, either in speaking or in writing. Nothing was thought of, but disputations, declamations, and the acting of the plays of Terence. The classics were read merely for the purpose of gleaning from them phrases to be used in constructing Latin sentences; and, provided that an agreeable fullness and cadence was thereby secured to the expression, but little heed was given to the contents. Such we find to have been the spirit of education among the Protestants, equally with the Jesuits; Trotzen-dorf and Sturm, Wurtembergers and Saxons, agreeing herein with the Jesuit general, Claudius di Aquaviva.

Nevertheless, in the more liberal-minded Erasmus, there appeared indications of a rebellion against this universal tendency: with him arose a new type of culture, which may be appropriately styled "verbal realism." This we will now endeavor to analyze, in order in the sequel to distinguish it more clearly from "real realism."

Erasmus demanded of the grammarian or philologist (and it would really appear self-evident,) that he should learn many things, without which, he would be in no condition to understand the classics. For instance, he insisted upon a knowledge of geography, arithmetic, and natural science. He did not, however, exact that perfect and full acquaintance with these topics possessed by the adept, but only a general knowledge of them all, which, nevertheless, was a great advance on the profound ignorance which had hitherto been acquiesced in.

As in so many other literary aspirations and achievements, Melancthon, in this matter also, followed in the wake of Erasmus. We have seen that, even while at Tubingen, he did not rest contented with philological pursuits alone, but used every endeavor to acquire universal

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knowledge, turning his attention to physics, mathematics, astronomy, history, and medicine, and all his life he remained true to this desire for universal culture.

In what spirit he studied all these sciences, especially the natural, he intimates in many places. Thus, in the dedication to his physics, addressed to Meienburg, the Mayor of Nordhausen, he says: "Although the nature of things can not be absolutely known, nor the marvelous works of God be traced to their original, until in that future life we shall ourselves listen to the eternal counsel of the Father, Son, and Holy Spirit, nevertheless, even amid this our present darkness, every gleam and every hint of the harmony of this fair creation forms a step toward the knowledge of God and toward virtue, whereby we ourselves shall also learn to love and maintain order and moderation in all our own acts. Since it is evident that men are endowed by their Creator with faculties fitted for the contemplation of nature, they must, of necessity, take delight in investigating the elements, the laws, the motions, and the qualities or forces of the various bodies, by which they are surrounded." "The uncertainty which obtains with regard to so much in nature," he says elsewhere, "should not deter us from our search, for it is none the less God's will that we trace out his footsteps in the creation." "Let us prepare ourselves," he continues, "for admission to that enduring and eternal Academy, where all the imperfections of our philosophy shall vanish in the immediate presence of the Master-BUILDER, who there shall Himself show us his own archetype of the world."

"Many," he proceeds to say, "will smile at these Aristotelian beginnings; but they are the rudiments of what is destined, one day, to become a perfected philosophy. Were the powers of men on a greater scale than we find them, still their knowledge must, as now, proceed from small beginnings. In such a plain and simple manner might Adam once have taught his son, Abel, philosophy; pointing him to the heavens, the stars, the land, the water, teaching him of the times and seasons, and, in all his teachings, directing him up to God the Creator."

Further on he admonishes the learner, with an intelligent choice to read the best authors on physics, to avoid all controversy, and to make use of a faultless Latin style. "For," he says, "he who takes pains to weigh his words will form a clear conception of the objects he is describing. Where, on the contrary, a person coins uncouth and strange words, his ideas will be sure to be crude and anomalous; as in the writings of Scotus and his fellows, you will not merely find the language corrupt, but likewise that vague shadows of truth, or it

may be dreams, have been summoned up, and new words formed to express them."

Then he relates how Paul Eber, in connection with himself, has projected the text-book in question, upon the basis of Aristotle. And he adds his caution against the course of those who deem it a mark of genius to make a parade of high-sounding sentiments; for "the right spirit in the quest of truth consists in the love of truth." Science must be applied to life. "The church too is benefitted by these physical studies; as, for instance, we have often to speak of the harmony of the creation, so, likewise, of the derangement of this harmony, and the evils which God has visited upon man in consequence of the fall." While preparing his psychology, in which he treats of the entire nature of man, he sought an interview with the Nuremberg doctors of medicine, and requested the celebrated Leonard Fox to send him communications upon anatomy, temperaments, &c. His enthusiasm for astronomy, he expresses thus, in his preface to John Sacrobusto's book on the sphere. This book he thinks peculiarly adapted to schools, "because the author understood how, from the great mass of astronomical facts, to select the simplest and most essential." Then he praises the study of astronomy, and quotes, with commendation, Plato's saying, "that it was to gaze upon the stars that eyes were given to men. For to look at it, the eye itself would seem to bear an affinity to the stars." "And then too, the perdurable harmony of the starry heavens bespeaks a God. Thus, philosophers, who despised astronomy, were atheists, denying our immortality. The interpretation of the Holy Scriptures, and the conduct of life, equally called for a knowledge of astronomy. What would become of men, had they no chronology for the past, no calendar for the present? Neither the church nor the state could stand without it." And further on, he lauds the Germans, Purbach and Regiomontanus, through whose labors, astronomy, after being in disrepute for centuries, had been again brought into honor. Thus those Epicurean theologians, who scorned and rejected, not astrology alone, but a firmly-based scientific astronomy also, had more need of the physician than the geometer, to be cured of their madness. In the preface to his edition of Aratus, addressed to Hieronymus Baumgartner, he says, "the knowledge of nature we must learn from the Greeks; Aratus throws light upon much in the Latin poets." And against the enemies of mathematics, he bears the following testimony, in a letter to Camerarius, "I can only laugh over your anger that my recommendation of mathematics has been condemned. In it I had no other aim, than to restore to the schools the right use of this science, and to allure youth to the

study of it. This I have desired, and for this will I labor, so long as any opportunity is left to me to help forward the cause of sound learning." But how ill it must have fared with the mathematics, when, as we have elsewhere cited, the mathematical professor at Wittenberg, lectured upon simple numbers, or the four primary elements of arithmetic; this fact, of itself, forms a practical comment on the entire neglect into which arithmetic had fallen in the schools.

But much as Melancthon's defense of astronomy and mathematics merits our approval, yet we must not close our eyes to the fact that, he, like so many of his contemporaries, was a firm believer in the superstitions of astrology.* In support of this belief, he cites the saying of Aristotle, that "the world is under the dominion of the heavens." Neither the learned treatise of Picus di Mirandola against astrology, nor Luther's hearty contempt for it, could ever wean him from this superstition, as is evinced by the practical use he made of it throughout his life.

In common with many eminent astronomers of that day, he adhered to the Ptolemaic system, and this, although his friend and colleague, Erasmus Reinhold, was among the first to recognize the claims of Copernicus. And truly, what an entire change, both in modes of thought as well as in text-books, was called for by that great work of Copernicus, "*On the revolutions of the heavenly bodies*;" for it required every work on astronomy to be rewritten, every opinion, and every method of instruction, to be reconsidered.

Allusion has already been made, in another part of this work to Luther's earnest and lively recommendation of the study of the "real" sciences, such as history, mathematics, astronomy, and music.

But, despite all the expostulations of Erasmus, Melancthon, and Luther, these studies, as we have had occasion to observe, were sadly neglected, both at schools and universities; nor did they begin to receive a gradually increasing attention until the seventeenth century.

But what are "reals," and what is "realism?" These questions are not easy to answer, even after all that we have said in elucidation of them. Our task, however, will be simplified, if we divest ourselves of the views and conceptions obtaining on this subject at the present day, and confine our thoughts to the sixteenth century. The philologist of that period aimed, in the study of the classics, at a two-fold object. In the first place, he applied himself merely to the lan-

* He thus writes of his son-in-law, Sabinus:—"Sabinus is of a head-strong nature, and will not listen to advice; this is due to the conjunction of Mars and Saturn, at his nativity, a fact which I ought to have taken into account, when he asked the hand of my daughter." And, because the mathematician, Hansfurt, who cast his nativity when he was a boy, had predicted that peril would befall him from the North Sea, and the Baltic, he declined invitations both to Denmark and to England.

guage of ancient authors, grammatically, as he considered its etymological and syntactical forms; critically, as he scrutinized the accuracy of the text; and æsthetically, while he weighed the expression and the rhythm of the prose writer or the meter of the poet. At the same time he read both prose and poetry, with constant reference to a more and more perfect imitation of them, both in speaking and in writing. And, secondly, he applied himself to the contents, whatever they might be, whether they related to war or to peace, to affairs of state, to nature, art, mythology, etc. This study of the contents of an author was afterward styled the study of "reals," to distinguish it from that of language alone. Such was that study upon which Erasmus and Melancthon laid so much stress; but it was nevertheless by no means conducted independently of the ancients, being based in great part upon their writings, and then, in turn, used as indispensable aids in their interpretation.

Let the reader imagine himself, on the one hand, regarding solely the language of the classics, and taking their subject into account only where this is required to throw light on the words; and, on the other hand, penetrating to the subject-matter of an author, and giving no more attention to the phraseology than is absolutely necessary to an understanding of that subject-matter. In this latter case, his ideal will be to convert the language into a perfectly transparent medium, and to read the classics without embarrassment, as though Greek or Latin were his mother tongue.

Reading the classics out of pure regard for the language, belongs chiefly to the professional philologist. This study of language, in and for itself, might be called pure philology, after the analogy of the pure mathematics. These have to do, for instance, with unknown quantities, with numbers in the absolute, with algebraic formulæ. And, as the pure mathematics are applied to astronomy, optics, acoustics, etc., becoming the handmaid to these sciences, so pure philology ministers to the purposes of the historian, the archæologist, etc.

This contest between "reals" and "verbals," had presented itself, as we have seen, to the minds, both of Erasmus and Melancthon; but the terms "reals" and "realism" were not, so far as I can learn, employed by either of them. Nor is this strange, if we consider that they flourished near the period when the term "realism," introduced by the scholastics, as contrasted with "nominalism," had a meaning wholly unlike that of the same term in its present acceptance.

When this term first began to change its original meaning, we may gather from a treatise by the well-known philologist, Taubmann,

which appeared in the year 1614. In this he says, "there is one thing which has often excited my surprise, and that is, if any one devotes unusual care to the acquisition of a graceful and elegant style, young men, and sometimes even the teachers of young men, will call him, by way of derision, philologist, critic, and grammarian, or, in one word, verbalist; but to themselves they arrogate the new name of realists, thereby intimating that their concern is with things alone, while those others, wholly absorbed in language, overlook the matter spoken of."

It will be observed that realists are here contrasted, not with humanists, but with verbalists. *Verba valent sicut nummi*. Evidently, then, the realists to whom Taubmann alludes, found their advantage in fastening upon their opponents the epithet verbalists; for thereby they branded them as dealers in words, who pursued the shadow and lost the substance. In our day, however, the tables are turned, since the verbalists have assumed the new title of humanists, and, by so doing, have given the realists, in no vague manner, to understand that they count them for barbarians, and, as such, destitute of all ennobling culture.

"But," my readers may ask, "what is to be understood by the expression 'verbal realism?' Is it not a contradiction in terms?" Apparently it is; yet we shall see, in the sequel, that besides the general distinction between "verbals" and "reals," there also subsists a twofold division of realism itself; viz., into verbal and real. Some indications of this latter division we have already met, in the close of our sketch of the earlier universities. Here, for instance, astronomy was taught without an observatory, anatomy without dissections, botany without herbals, natural philosophy without experiments, all from books,—Aristotle, Pliny, Aratus, Galen, etc.,—and this knowledge was then made use of in turn for the elucidation of the same books from whence it was drawn. Such was "verbal realism" in those times, and such is it likewise in our day! The meaning that we attach, on the other hand, to the phrase "real realism," will appear more clearly in the light of the succeeding chapter upon Lord Bacon.

III. LORD BACON,

HIS PHILOSOPHY, AND ITS INFLUENCE UPON EDUCATION.

(Translated from the German of Von Ranmer, for the American Journal of Education.)

FRANCIS BACON was born at London, on the 22d of January, 1561. His father, Nicholas Bacon, was Lord Keeper of the Seal, in the reign of Queen Elizabeth; his mother, whose maiden name was Anna Cook, was a pious and highly intellectual lady, well versed both in the Greek and Latin classics. When quite young, Bacon displayed such a mature judgment, that Queen Elizabeth, who took great pleasure in conversing with him, addressed him as her little Keeper of the Seal. When not quite sixteen years of age, he was placed at Trinity College, Cambridge. His principal instructor there was John Whitgift, a doctor of theology, and afterward Archbishop of Canterbury. While at Cambridge, he bestowed diligent study upon Aristotle, but with all his regard for him, he conceived a distaste for his doctrines; and, even from this early period, we may date the commencement of his warfare against scholasticism.

After he had completed his education at the university, his father, wishing to initiate him in politics, commended him to the charge of Paulett, English ambassador at the Court of France. During Bacon's residence at Paris, his father died, leaving but a moderate property to be divided between himself and his four brothers. In after years, his brother Anthony bequeathed him an independent fortune.

On his return to England, he applied himself with ardor to the study of law, and was soon chosen councilor by Elizabeth; but she did not advance him to any higher post of honor. This was reserved for James I., who made him Lord High Chancellor, with the titles of Verulam and Vice-Count St. Albans.

He married the daughter of a wealthy London alderman, whose name was Burnham, by whom, however, he had no issue.

Six years before his death, he was deposed from his office. And that he had been guilty of misdemeanor therein, is, alas! but too evident. He was convicted of having used his high judicial function in the service of bribery, and James I. could do no more than mitigate the sentence that was pronounced against him, nor could he

ever afterward recover the influence that he had lost, though he sought it with the most fulsome flatteries.

It is truly painful to see a man of such commanding talents sink into such depths of moral degradation. It would appear, in some instances, as if an over-exertion of the intellectual powers operated to the injury of the moral nature; since constant mental labor leaves no time for self-consecration and self-conquest, yea, in the end, destroys all power and capacity therefor,—so much does such labor engross the whole man.

But the closing years of Bacon's life redounded to the inestimable advantage of science; for he gave his undivided attention to it, after his removal from the service of the state.

He died on the 9th of April, 1626, in the 66th year of his age, having lived to be three years older than Shakspeare, whom he survived ten years. Seldom have two such eminent men lived at the same time, and in the same place,—men of such vast, and yet opposite endowments. It would almost appear that, in Bacon, the genius of prose, in Shakspeare, of poetry, came into the world in person: in one, an understanding, the highest, clearest, most searching, and methodical; and, in the other, an imagination of unbounded creative capacity. The poet, it is true, manifested a keen intellectual insight, together with a wonderfully comprehensive knowledge of human nature; but we can hardly concede to Bacon much of that sense of beauty which is so marked an attribute of the poet. Both of them, however, were alike in achieving superior fame by the exercise of their understanding, and in suffering the glory of that fame to be tarnished by the abuse of their imagination. How far justice was meted out to Bacon, we shall be better able to judge in the sequel.

A third great genius, born in the same decade with Shakspeare and Bacon (1571,) deserves mention here, as ranking with the mightiest minds that the world ever produced; I refer to Kepler. But what a remarkable contrast does the mutual non-intercourse of these three giant spirits present to the warm and living fellowship that subsisted between Luther and Melancthon. It is as though they had not known of each other's existence. Bacon, notwithstanding the universality of his writings, has no where made mention of Shakspeare; he treats of dramatic poetry, but utters not a syllable in regard to the greatest dramatist "that ever lived in the tide of times," although this one was even his fellow-citizen. So, likewise, Bacon treats often of astronomy, and introduces Copernicus and Galileo, but Kepler never. And yet, Kepler must have been known to him, for, in the year 1618, he dedicated his great work, "*Harmonice Mundi*," to the

self-same King James whom Bacon revered as his great patron, and, in many of his own dedications, had styled a second Solomon.

Bacon's works have appeared in repeated editions, both in separate treatises and in a collected form. Many of them have no bearing upon our present inquiry; such, for instance, as the "*Political Speeches*," the "*Essays, Civil and Moral*," the "*History of the Reign of Henry VII.*" etc. On the contrary, his philosophical works proper are of the utmost value in their relation to the science of education, although, on a cursory glance, it may not appear so. What Bacon advanced directly on this subject, is comparatively unimportant; but the indirect influence which, as the founder of the inductive method of philosophizing upon nature, or "*real realism*," as I have elsewhere styled it, he exerted upon education, this, though we are unable always to analyze it, is nevertheless invaluable. The reader will therefore follow me without surprise, if, in the succeeding pages, I shall appear to have lost sight, for a time, of the purely educational element.

Bacon has himself given us a sketch of the great philosophical work, which he designed to write, and parts of which he completed. The work was called "*Instauratio Magna*," and it was divided into six parts. The first part was an encyclopedia of all human learning, whether ancient or modern. In this he purposed, especially, to point out deficiencies, and suggest new subjects of inquiry. This part we have; it is the "*De dignitate et augmentis scientiarum*," is in nine books, and is the best known of all his works. Some portions of it are completely elaborated; others consist of a more or less thoroughly meditated plan. The second part of the "*Instauratio Magna*," Bacon published under the title of "*Novum Organum, Sive judicia vera de interpretatione Naturæ*." He worked upon this part for many years; at his death, there were found twelve different elaborations of it. It is a collection of great thoughts, remarkable for their depth, their freshness, and the extreme nicety with which they are adjusted, the one to the other,—and all are intelligibly expressed in aphorisms, whose every word we feel has been carefully weighed.

The third part of the "*Instauratio Magna*" was designed to present a collection of the facts of natural history, and experimental philosophy, or "*Phænomena universi*:" some portions of this were completed. In the fourth part, or "*Scala intellectus*," Bacon gives special applications of his philosophy in examples of the correct method of investigating nature. The fifth, or "*Anticipationes philosophiæ secundæ*," was to be a sketch of the preparations of preceding ages for the final introduction of the new philosophy; while the sixth was to em-

body the new philosophy, in all its completeness and grandeur. This crowning part of the whole work Bacon left wholly untouched.

We shall confine our attention, at the present time, however, chiefly to the two first and completest divisions of this great work, viz., to the "*De augmentis scientiarum*" and the "*Novum Organum*." But, in order to judge Bacon aright, we must first cast a glance at the intellectual character, not only of the age in which he lived, but of the centuries just preceding.

We have seen that, in those centuries, supreme homage was paid to the word alone in all books, in disputations and declamations, and that thinking men displayed neither sense nor feeling for any thing but language, deriving from this, and basing upon this, all their knowledge. Every avenue to nature, to a direct and independent investigation of the external world, was closed. That gifted monk, Roger Bacon, a most worthy predecessor of Lord Bacon, was, in the middle ages, regarded as a magician; and, as a magician, suffered persecution, because he was not content to view nature through the eyes of Aristotle, choosing rather to go himself to the fountain-head and converse with her, face to face. He maintained that men ought not to be satisfied with traditional and accepted knowledge. Reason and experience were the two sources of science; but experience alone was the parent of a well-grounded certainty, and this true *empiricism* had hitherto been wholly neglected by most scholars. That Roger Bacon did not speak of experimental knowledge, as a blind man would discourse of colors, is proved by some remarkable expressions of his, anticipatory and unambiguous, upon spectacles, telescopes, and gunpowder. But Roger stood alone in that age of the world, like a solitary preacher in the desert; and hence it was that he was regarded with wonder, as a magician, and persecuted.

But that which showed in Roger Bacon as mere anticipation, and obscure prophecy, appeared, after the lapse of three hundred years, full-formed and clear in Francis Bacon. Even as Luther came forth to strip off the thick veil of human traditions, that had been woven over the revelation of God in the Holy Scriptures, distorting its features, concealing it, and even burying it in oblivion, for multitudes of his fellow men, so did Bacon make war upon the traditions and postulates of men, which had quite darkened over the revelation of God, in the material world. He wished men no longer to put their faith in arbitrary and fanciful glosses upon this revelation, but to go themselves directly to its living record.

He saw, moreover, that the more sagacious intellects of his time were wholly divorced from nature, and wedded to books alone; their

energies all expended upon words, and belittled by the endless hair-splitting subtleties of logic. He perceived that the physical philosophy current among his contemporaries, was gathered from Aristotle, or his disciples; and that it no where rested upon the solid basis of nature. Men read in books what authors *said* concerning stones, plants, animals, and the like; but to inspect these stones, plants, and animals, with their own eyes, was far enough from their thoughts. And hence were they compelled to defer to the authority of these authors, whether they would or no, because they cherished not the remotest idea of subjecting these descriptions and recitals to the test of actual experiment. Consider, too, that such test was the more needed, since these very authors had, mostly themselves, received their information even from third or fourth hands. We are amazed when we read the farrago of incredible and impossible stories, in which the books of natural history, especially those of the middle ages, abounded; when we contemplate, for example, the monsters to which we are introduced in the zoologies of this period, or the marvelous virtues which were foolishly claimed for various stones, &c. And even if these books, thus treating of nature, did contain many things that were true, yet it was manifest, that progress in natural science was not to be hoped for, so long as men remained satisfied with their teachings. And how, I ask, could men have been otherwise than satisfied, when they appeared not even to realize the existence of nature, the mighty fountain-head of all authorities.

Now, from this unworthy and slavish homage and deference to authors, authors too, mostly, with no title to confidence, Bacon purposed to recall men, by inviting them to a direct communion with the creation around them, and by pointing them to those eternal truths, whose obligation they were bound humbly to acknowledge, and yet whose claims would never tarnish their honor.

For an implicit obedience to nature is attended with a double reward, viz., an understanding of her processes and dominion over her. "Forsooth," he says, "we suffer the penalty of our first parents' sin, and yet follow in their footsteps. They desired to be like God, and we, their posterity, would be so in a higher degree. For we create worlds, direct and control nature, and, in short, square all things by the measure of our own folly, not by the plummet of divine wisdom, nor as we find them in reality. I know not whether, for this result, we are forced to do violence to nature or to our own intelligence the most; but it nevertheless remains true, that we stamp the seal of our own image upon the creatures and the works of God, instead of carefully searching for, and acknowledging, the seal of the Creator, mani-

fest in them. Therefore have we lost, the second time, and that deservedly, our empire over the creature; yea, when, after and notwithstanding the fall, there was left to us some title to dominion over the unwilling creatures, so that they could be subjected and controlled, even this we have lost, in great part, through our pride, in that we have desired to be like God, and to follow the dictates of our own reason alone. Now then, if there be any humility in the presence of the Creator, if there be any reverence for, and exaltation of, his handiwork, if there be any charity toward men, any desire to relieve the woes and sufferings of humanity, any love for the light of truth, any hatred toward the darkness of error,—I would beseech men, again and again, to dismiss altogether, or at least for a moment to put away, their absurd and intractable theories, which give to assumptions the dignity of hypotheses, dispense with experiment, and turn them away from the works of God. Then let them with teachable spirit approach the great volume of the creation, patiently decipher its secret characters, and converse with its lofty truths; so shall they leave behind the delusive echoes of prejudice, and dwell within the perpetual outgoings of divine wisdom. This is that speech, and language, whose lines have gone out into all the earth; and no confusion of tongues has ever befallen it. This language we should all strive to understand; first condescending, like little children, to master its alphabet." "Our concern is not," he says in another place, "with the inward delights of contemplation alone, but with all human affairs and fortunes, yea, with the whole range of man's activity. For man, the servant and interpreter of nature, obtains an intelligent dominion over her, only in so far as he learns her goings on by experiment or observation; more than this, he neither knows, nor can he do. For his utmost power is inadequate to loosen or to break the established sequence of causes; nor is it possible for him to subjugate nature, except as he submits to her bidding. Hence, the twin desires of man for knowledge, and for power, coincide in one; and therefore the ill-success of his operations springs mainly from his ignorance of their essential causes."

"This, then," he continues, "is the substance of the whole matter, that we should fix the eyes of our mind upon things themselves, and thereby form a true conception of them. And may God keep us from the great folly of counting the visions of our own fancy for the types of his creation; nay, rather may he grant us the privilege of tracing the revelation and true vision of that seal and impress which he himself has stamped upon his creatures." In another place Bacon entreats men "for a little space to abjure all traditional and inherited

views and notions, and to come as new-born children, with open and unworn sense, to the observation of nature. For it is no less true in this human kingdom of knowledge than in God's kingdom of heaven, that no man shall enter into it except he become first as a little child !” Man must put himself again in direct, close, and personal contact with nature, and no longer trust to the confused, uncertain, and arbitrary accounts and descriptions of her historians and would-be interpreters. From a clear and correct observation and perception of objects, their qualities, powers, etc., the investigator must proceed, step by step, till he arrives at axioms, and at that degree of insight, that will enable him to interpret the laws, and analyze the processes of nature. To this end, Bacon proffers to us his new method, viz., the method of induction. With the aid of this method, we attain to an insight into the connection and mutual relation of the laws of matter, and thus, according to him, we are enabled, through this knowledge, to make nature subservient to our will.

“Natural philosophy,” he says in another place, “is either speculative or operative; the one is concerned with the invention of causes, the other with the invention of new experiments. Again, speculative natural philosophy, or theory, is divided into *Physic* and *Metaphysic*. Natural history describes the variety of things; *Physic*, the causes, but variable or respective causes. As, for instance, it seeks to know why snow is white; but *Metaphysic* inquires after the true nature of whiteness, not only as it finds this quality in snow, but also in chalk, silver, lilies, &c. Thus *Metaphysic* mounts, at last, to the knowledge of essential forms, or absolute differences,—the Ideas of Plato. These forms constitute the ultimate aim of science. *Physic* leads, through acquaintance with immediate causes, to *Mechanic*; but *Metaphysic*, by virtue of dealing with ultimate forms, leads to *Magic*. Thus *mechanic* and *Magic* carry into practice what *Physic* and *Metaphysic* advance as theory. The knowledge of occult forms brings the power to work marvels.”

Natural philosophy Bacon compares to a “pyramid, whose basis is Natural History; the stage next the basis, is *Physic* branching into Practical *Mechanic*; the stage next the vertical point, is *Metaphysic*. As for the vertical point, ‘*Opus quod operatur Deus a principio usque ad finem*,’ the summary law of nature, we know not whether man's inquiry can attain unto it.”

Thus have we given a very general sketch of the positive side of the Baconian philosophy. Its gradations are as follows: beginning at observation and experiment, it lays down, by a process of induction, higher and higher axioms, till at last it penetrates to essential

forms, increasing insight adding ever new vigor and breadth to experiment.

But Bacon well knew that many obstacles stood in the way of the reception of his new philosophy, and that he must first remove these obstacles. The greater portion of his "*Novum Organum*" is accordingly occupied with polemics.

Idols and false notions, he says here, govern the human understanding to that degree that, before the introduction of any positive system of truth, they must all be cleared away, and men be warned against them. There are four kinds of idols.

Idols of the Tribe; or generic, and founded in the universal nature of mankind.

Idols of the Cave; or specific, growing out of the diversities of individual character.

Idols of the Forum; or such as proceed from the social relations of men.

Idols of the Theater; or those which have been forced into the human mind by successive schools of philosophy, creating, as it were, fictitious or scenic representations of life.

I will now extract, from Bacon's exposition of these various idols, some remarks, bearing upon education. "It is false," he says, "to assert that our senses are the ultimate measure of the world; all the perceptions of the senses, as well as all the conceptions of the mind, find their correspondences in the nature of man, not in the being of the universe. The human understanding receives the rays that stream from created objects, as an uneven mirror, which mingles its own nature with that of the object it reflects, giving to them false shapes and colors."

Bacon here disclaims that absolute knowledge of objects, which penetrates to the essence of their being; for such all-sufficient knowledge is the prerogative of God alone. Our point of view is forever outside of the center of the universe. But yet he does not appear to realize the intimate connection of this view with the fall of man, and the conditions affixed, in consequence thereof, to human learning. For even were the knowledge possible to man radical and complete, yet it reaches only to the border-land, beyond which lie the inscrutable mysteries of the Deity. These mysteries man can prefigure and believe, but never fathom.

"The human intellect is led by its very essence to assume a greater order and equality in nature than it actually finds." In another place he says, "The light of the understanding is not a clear light, but it is clouded by the will and the affections. Hence man rejects

that which is difficult, because it calls for patient inquiry ; that which is moderate, because it narrows his hopes, &c." How appropriate is this remark in the education of the young, and how little is instruction based upon just views of the relation between the will and the understanding, and upon the taste or distaste of pupils for given pursuits ; and how evident it is, that the will must be animated by the conscience, where the gifts of intellect have been sparingly bestowed !

"Some minds are lost in admiration of antiquity, others in the passion for novelty, but only the select few are so well balanced as to keep a medium course, and neither to pull down that which has been skilfully built up by the ancients, nor to despise that which has been well done by the moderns."

This remark should serve to encourage teachers, especially at the present day, when a superstitious reverence for antiquity is engaged in active conflict with a superstitious regard for whatsoever is new. Further on, Bacon attacks the various philosophies which have been in vogue at different periods. "The devotees of science have been either empiricists or dogmatists. The empiricist, like ants, have heaped up only that which they could put to use ; and the dogmatists, like spiders, have spun threads out of their own bowels. The bees, on the contrary, hold a course midway between these two ; for they sip of the flowers of the field and garden, and the nature of these they change and distil, by virtue of the force that is in them. So a true philosophy is not effective alone, or chiefly, by the power of thought which it contains, nor does it proceed out of a memory filled with the results of observation and experiment, but all its stores are changed and assimilated by the understanding." He likewise censures "an undue respect for authorities, and that too common error of opinion, that nothing new remains to be found out." He condemns sin as the bane of all knowledge. He says, "men have entered into a desire of learning and knowledge, not for the benefit and use of their fellows, but from a natural curiosity and inquisitive appetite, for victory of wit and contradiction, or for lucre and profession." Most sharply does he castigate liars. "Knowledge is nothing else than a representation of truth ; for the truth of being and the truth of knowing are one, differing no more than the direct beam and the beam reflected."

Highly instructive to us also are his repeated attacks upon the Greeks. "The wisdom of the Greeks," he says, "was rhetorical, expended itself upon words, and had little to do with the search after truth." Their philosophers, according to him, even Plato and Aristotle, were altogether sophists ; a few of the graver and more earnest

spirits of an earlier period, like Empedocles, Anaxagoras, &c., excepted. True, indeed, was that saying of the Egyptian priests, "the Greeks continue children forever, having neither an antiquity of science, nor a science of antiquity. For they have the nature of boys, inasmuch as they are full of loquacity, but incapable of reproduction, and their wisdom is therefore rich in words but poor in deeds."

Elsewhere, he says, "To speak truly, '*antiquitas seculi, juvenus mundi*,' and *these* times are the ancient times, when the *world* is ancient. Hence those elder generations fell short of many of our present knowledges; they knew but a small part of the world, and but a brief period of history; we, on the contrary, are acquainted with a far greater extent of the old world, besides having uncovered a new hemisphere, and we look back and survey long periods of history."

This passage is the embodiment of that ultra anti-classical view, against which, in Bacon's own day, Bodley, and, in our own times, Goethe, have so earnestly protested. How prejudicial to the cause of education it must be we can readily imagine, for it sounds in our ears with the authority of a voice from the past, cheering on our narrow-minded realists in their opposition to the study of the ancients.

But though it is not possible for us entirely to exculpate Bacon in this his judgment of antiquity, yet, in strict justice, we ought to make all due allowance for his point of view. His was the philosophy of nature; a knowledge of nature, and power over her by virtue of that knowledge, were his aim. "What have the ancients done in this particular," he asked; but gave no thought to Homer, Sophocles, Demosthenes, and Phidias; and seeing, as in a vision, the air-pumps, electric telegraphs, and steam-engines, the seventy-eight thousand species of animals, the seventy-eight thousand species of plants, of our day,—seeing all these rewards of knowledge and power, which were to flow from the adoption of his method, he looked upon the ancients with indifference. But even from this point of view, he should have conceded to them far more than he did. It is enough that we mention the determinations of latitude and longitude, the length of a meridian, the precession of the equinoxes; enough that we speak of the great Hipparchus, of Archimedes, and Apollonius of Perga, of Hippocrates, of Aristotle's "History of Animals," and the "Garden of Plants" of Theophrastus. And how much more could I bring forward in proof of the greatness of the Greeks, even in natural philosophy! And, more than all, what shall we say of those great fundamental thoughts, which have tested the human intellect for more than two thousand years?

Bacon's hostility to Aristotle was mainly to be ascribed to the scholastics, who called themselves his disciples, though their master's works were not known to them, save through the medium of unfaithful translations. He concedes to them "sharp wit" indeed, but adds "that it only worked upon itself, as the spider worketh her web, and brought forth mere cobwebs of learning, and nothing more."

But we find him no more favorable to the anti-scholastics, whom we may style the philologists of the fifteenth and sixteenth centuries. "At the time of Martin Luther, an affected study of eloquence began to flourish. There arose a great enmity and opposition to the scholastics, because they considered no whit the pureness of their style, but took the liberty to coin and frame new and barbarous terms of art, to express their own sense, and to avoid circuit of speech. This enmity speedily ended in producing the opposite extreme; for men began to hunt more after words than matter, and more after the choiceness of the phrase, and the round and clean composition of the sentence, than after the weight of matter, soundness of argument, life of invention, or depth of judgment. Then did Sturmius spend such infinite and curious pains upon Cicero and Hermogenes. Then did Erasmus take occasion to make the scoffing echo, '*Decem annos consumpsi in legendo Cicerone*,' and the echo answered in Greek, '*Ovê, asine*.'" "In sum," he concludes, "the whole inclination and bent of those times was rather toward *copia* than weight."

We have now sufficiently characterized Bacon's polemics. The foregoing paragraph proves that he regarded what the philologists of the sixteenth and seventeenth centuries styled realism, as wholly distinct from the realism that his philosophy required. This latter I have ventured to call "real realism," in contrast with the verbal realism of the philologists, who knew roses and wine only as they were described in the verses of Anacreon and Horace.

Though there were many before Bacon, especially artists and craftsmen, who lived in communion with nature, and who, in manifold ways, transfigured and idealized her, and unveiled her glory; and though their sense for nature was, in a measure, highly cultivated, so that they attained to a practical understanding of her ways, yet this understanding of theirs was, so to speak, at its highest, merely instinctive; for it led them to no scientific deductions, and yielded them no thoughtful, sure, and legitimate dominion over her.

To the scholars of that day Bacon's doctrine was wholly new. It summoned them to leave for a while their books, which had been their vital element,—

"And with untrammelled thought
To talk with nature, face to face."

No. 15.—[Vol. V., No. 3.]—43.

Thus Bacon was the father of the modern realists, and, as I shall take occasion to show hereafter, of realistic principles of instruction. Traces, moreover, are to be found in him of the harsh and repulsive features which characterize our modern matter-of-fact philosophy. As an instance in point, consider the sentence which he pronounced against the ancients; how he weighed them in the scales of his own philosophy, and found them wanting; how low an estimate he set upon what they did bring to pass, counting it all as the result of pure accident, because not arrived at by means of systematic induction. The exquisite sense of beauty, and the high culture of art of the ancients, seemed, in fact, to have been wholly ignored by the prosaic Bacon, as it is by the realists of the present age.

His method itself, likewise, and still more that which by virtue of this method he accomplished, in the way of observation and experiment, are open to many objections. He tells us that he is about to wed the human intellect to nature, and on this announcement we look to see a joyful marriage and a union of love. But, instead of this, he presents us with a slow and wearisome plan of a siege, for the reduction of the stronghold of nature, whom he apparently desires us to starve into a surrender. For proof of this we need only turn to his "*History of the Winds*," written upon this plan, to say nothing of numerous kindred paragraphs, scattered throughout the second book of his "*Novum Organum*." He had evidently convinced himself that, with the aid of his method of induction, men could as intelligently and surely advance to the accomplishment of their aims, in the subjection of nature, as an able general predicts, to a certainty, that a fortress, to which he has laid siege, will surrender within a given time. If earlier observers, without such method, had made any progress in the investigation of nature, this, according to Bacon, should be ascribed to accident. "But this method makes us independent of accident, for it is all-comprehending and infallible. Nay, it is a way in which the blind can not err, a way too which places the man of humble capacity on a level with the genius."

These words appear addressed to us by Pestalozzi and the Pestalozzians. But such a view is derogatory to the gifts which God has lavished upon his chosen children. What though Bacon, by the use of his method, has built a solid waggon track to Helicon? The soaring intellects of a Kepler and a Galileo need no such beaten course; they are already upon the mountain-top, before the waggons are ready to set forth.

This *anti-genial* element of the Baconian method Goethe has treated with a well-merited severity. When a man of fertile imagin-

ation and keen insight fixes his attention upon one important fact, seizes the law revealed therein, and holds fast that law, the results that he brings to pass are more far-reaching in their scope and influence, than when an adust and hackneyed plodder, wearys himself through long years in a methodical heaping together of myriads of isolated and less important facts, without once detecting the character and essence of the simplest of them all. For consider how truth flashed in upon the mind of Galileo, while watching the vibrations of a pendant chandelier, "a striking proof," says Goethe, "that for the man of genius, one fact is better than a thousand." For, according to him, in scientific researches every thing depends on what may be styled the "aperçu," or the instantaneous, intuitive recognition of the principle that underlies a given phenomenon.

But some one will ask, "do you then reject Bacon's method of induction in all its particulars?" By no means. It is only this idea of an equalizing scale applied to the mind, and his view that there is no other road to knowledge than the one that *he* has marked out, that merit our reproof.

In fact, Bacon himself, with a most happy inconsistency, often employs expressions that disarm all attack. For instance, take the following: "When a man brings to the contemplation of nature an open sense and a mind that is unentangled by the prejudices of tradition, he needs no such method." The favorites of fortune, the miracle-workers, as Luther calls them, are gifted with this unclouded vision; to this class Goethe himself belonged. With a lively sensibility, a refined organism, and a passionate love for nature, he needed not that any should say to him, 'open thine eyes and look around thee.' To him, the author of the lines,

"Nature is good and kind
Who clasps me to her breast,"

a marriage between the soul and the outward world was already a settled fact. "They that are whole need not a physician." But these miracle-workers are, alas, too rare; and most men must make use of a method which shall stimulate their sluggish spirits into life and energy.

As it regards the manner in which Bacon illustrated his method, as in the "*History of the Winds*," so severely commented upon by Goethe, he should be judged, in a measure, by the general tone of natural science in his own age. To Goethe's eloquent apology for "aperçus" or intuitive perceptions, Bacon might have replied, "your principles underlying phenomena, are what I have denominated 'forms,' which I nevertheless can not unveil by means of a single

fact taken symbolically, but only by induction, by a comparison of many facts, representing the varied shapes of one and the same Proteus."

In short, despite the objectionable manner in which Bacon, here and there, endeavored, in the concrete, to maintain, realize, and prove the deep and solid foundation-principles which he advanced, the truth of those principles remains yet unassailed; and, like a vital germ, they have grown, and are bearing fruit even to the present day. Bacon originated no school, but something greater and wider in its scope. He was the founder of the direct mode of questioning nature, a mode open alike to all, whatever their talent or abilities. He was, as we have before intimated, the creator of the practical experimentalism of the present day, which explores the world for material to work up into manufactured fabrics, and to him may be ascribed the present prevailing tendency, of the English nation especially, to utilitarianism, to that perfect subjection of nature, by the aid of science, that will lead men finally to a true rational magic.

* * * * *

I have now endeavored to present a brief abstract of Bacon's philosophy. I have also occasionally adverted to the influence which it has exerted upon mental culture, and, as a consequence, upon methods of instruction; an influence which, at the distance of two centuries, is still in the ascendant. But there are also many passages in the "*De augmentis scientiarum*" which have a direct bearing upon education. Of this nature is the second chapter of the Sixth Book, in which he treats of "*prudentia traditiva*," or knowledge delivered, and characterizes various methods of teaching. He gives the preference to the *genetic method*, where the teacher "transplants knowledge into the scholar's mind, as it grew in his own." Whatever is imparted in this way, will take root, flourish, and bear fruit. He commends aphorisms: "For representing a knowledge broken, they do invite men to inquire farther; whereas systems, carrying a show of a total, do secure men as if they were at farthest." "Methods should vary according to the subject to be taught, for in knowledge itself there is great diversity."

In one place he treats most strenuously and earnestly of the importance of education. "A gardener," he says, "takes more pains with the young than with the full-grown plant; and men commonly find it needful, in any undertaking, to begin well. We give scarce a thought to our teachers, and care little for what they may be, and yet we are forever complaining, because rulers are rigid in the matter

of laws and penalties, but indifferent to the right training of the young.

To this Bacon adds a panegyric upon the schools of the Jesuits, by way of introduction to another paragraph on education. It is as follows:—

“As it regards teaching, this is the sum of all direction: take example by the schools of the Jesuits; for better do not exist. However, I will add, according to my wont, a few scattered thoughts on this head. Collegiate training for young men and boys excels, in my opinion, that of the family or of the school. For not only are greater incentives to action to be found at colleges, but there too the young have ever before their eyes men of dignified bearing and superior scholarship, who command their respect, and whom they grow insensibly to imitate. In short, there is hardly a particular in which colleges do not excel. In regard to the course and order of instruction, my chief counsel would be to avoid all digests and epitomes of learning; for they are a species of imposture, giving men the means to make a show of learning, who have it not. Moreover, the natural bent of individual minds should be so far encouraged, that a scholar, who shall learn all that is required of him, may be allowed time in which to pursue a favorite study. And furthermore, it is worth while to consider, and I think this point has not hitherto received the attention that its importance demands, that there are two distinct modes of training the mind to a free and appropriate use of its faculties. The one begins with the easiest, and so proceeds to the more difficult; the other, at the outset, presses the pupil with the more difficult tasks, and, after he has mastered these, turns him to pleasanter and easier ones: for it is one method to practice swimming with bladders, and another to practice dancing with heavy shoes. It is beyond all estimate, how much a judicious blending of these two methods will profit both the mental and the bodily powers. And so to select and assign topics of instruction, as to adapt them to the individual capabilities of the pupils,—this, too, requires a special experience and judgment. A close observation and an accurate knowledge of the different natures of pupils is due from teachers to the parents of these pupils, that they may choose an occupation in life for their sons accordingly. And note further, that not only does every one make more rapid progress in those studies to which his nature inclines him, but again that a natural disinclination, in whatever direction, may be overcome by the help of special studies. For instance, if a boy has a light, inattentive, and inconstant spirit, so that he is easily diverted, and his attention can not be readily fixed, he

will find advantage in the mathematics, in which a demonstration must be commenced anew whenever the thoughts wander even for a moment.

These cautions respecting mental training may not, at the first glance, appear to abound either in weight or wisdom; but, acted on, they are both fruitful and efficient. For as the wronging or cherishing of seeds or young plants is that, that is most important to their thriving, and as it was noted that the first six kings, being in truth as tutors of the state of Rome in the infancy thereof, was the principal cause of the eminent greatness of that state which followed; so the culture and manurance of minds in youth hath such a forcible, though unseen operation, as hardly any length of time or contention of labor can countervail it afterward. And it is not amiss to observe how small and mean faculties, gotten by education, yet when they fall into great men or great matters, do work great and important effects, whereof I will give a notable example. And the rather, as I find that the Jesuits also have not neglected the cultivation of these lesser graces of the scholar, in which, as it seems to me, they have shown sound judgment. I speak of that art which, followed for a livelihood, brings reproach, but, used in education, does the best of service,—I mean the acting of plays. This strengthens the memory, gives volume to the voice, power to the expression, ease to the bearing, grace to the gestures, and imparts a wonderful degree of self-confidence, thus thoroughly fitting young men for the demands of a public career. Tacitus relates that a certain stage-player, Vibulenus, by his faculty of playing, put the Panonian armies into an extreme tumult and combustion. For there arising a mutiny among them, upon the death of Augustus Cæsar, Blæsus, the lieutenant, had committed some mutineers, which were suddenly rescued; whereupon Vibulenus got to be heard speak, which he did in this manner: ‘These poor innocent wretches, appointed to cruel death, you have restored to behold the light; but who shall restore my brother to me, or life unto my brother, that was sent hither in message from the legions of Germany, to treat of the common cause? And he hath murdered him this last night by some of his fencers and ruffians, that he hath about him for his executioners upon soldiers. Answer, Blæsus, what is done with his body? The mortalest enemies do not deny burial; when I have performed my last duties to the corpse, with kisses, with tears, command me to be slain besides him, so that these my fellows, for our good meaning, and our true hearts to the legions, may have leave to bury us.’ With which speech he put the army into an infinite fury and uproar; whereas truth was, he had no

brother, neither was there any such matter, but he played it merely as if he had been upon the stage."

It should be understood, however, that this passage on education is isolated, and by no means in connection with the general philosophical system of Bacon. It is surprising that the man who said, "It is no less true in this human kingdom of knowledge than in God's kingdom of heaven, that no man shall enter into it, except he become first as a little child," did not adhere to this sentiment, and carry it into all his speculations. When he taught that "men must abjure all traditional and inherited views and notions, so that with an open and unworn sense they might come to the observation of nature," why did he not apply his doctrine to that class, who know nothing by tradition, and who have nothing to unlearn,—I mean to children? Why did he not build anew the science of education upon the solid basis of realism? Instead of this, we find nothing but an ill-assorted far-rago of good, bad, and indifferent. I have already expressed my disapproval of the pernicious influence of the educational tenets of the Jesuits, which Bacon so highly recommends, especially their *primum mobile*, the principle of emulation. Much might be urged also against some of the features of seminaries and colleges. His advocacy of theatrical representations in schools is, singularly enough, supported by the above example from Tacitus; which, more nearly considered, is truly hideous, an example of a stage-player, who, in the reign of Tiberius, with the aid of surpassing eloquence, palmed off upon the Pannonian legions a wholesale lie, and so instigated them to a rebellion against their general. But he forgot to add, that Drusus most fitly recompensed the ill-omened orator for his all too potent speech with the loss of his head. Why did not Bacon, keen as he ordinarily proved himself in argument, rather use this example to condemn theatrical representations in schools, inasmuch as these representations very often pass from a mimic jest into a too serious familiarity with lies and deceit?

Meanwhile some of his views in the passage above quoted, as, against over hasty methods of imparting instruction, in favor of a judicious interchange between the easier and the more difficult branches of learning, and the like, are timely and encouraging.

But, though these doctrines insure their own reception, we ought not too hastily to conclude that Bacon's highest claims in the cause of education are based upon them. These claims proceed much rather from the fact, which I can not too often repeat, that he was the first to break out of the beaten track, and to address scholars, who lived and moved in the languages and writings of antiquity, yea, who

were mostly echoes of the old Greeks and Romans, and who had no higher ambition than to be so,—to address them in such language as the following: "Be not wrapped up in the past, there is an actual present lying all about you; look up and behold it in its grandeur. Turn away from the broken cisterns of traditional science, and quaff the pure waters that flow sparkling and fresh forever from the unfathomable fountain of the creation. Go to nature and listen to her many voices, consider her ways and learn her doings; so shall you bend her to your will. For knowledge is power."

These doctrines have exerted an incalculable influence, especially in England, where theoretical and practical natural philosophy are, in the manner indicated by Bacon, united, and where this union has been marvelously fruitful of results. Their influence, moreover, may be traced, at quite an early period, in the department of education. The first teacher who imbibed the views of Bacon was, most probably, Ratich. But we have the distinct acknowledgment from that most eminent of the teachers of the seventeenth century, Comenius, of his indebtedness to Bacon. In the year 1633, he brought out a work upon natural philosophy; and, in the preface to this work, he adverted to his own obligations to Bacon. He here called the "*Instauratio Magna*" "a most admirable book. I regard it as the most brilliant of the philosophical works of the present century. I am disappointed, however, that the keen-eyed Verulam, after furnishing us with the true key to nature, has not himself opened her mysteries, but has only showed us by a few examples how they may be opened, and so left the task to future generations." In another paragraph he says: "Do not we, as well as the ancients, live in the garden of nature? Why then should not we, as well as they, use our eyes and our ears? Why must we learn the works of nature from any other teachers than these, our senses? Why, I ask, shall we not throw aside our dead books, and read in that living volume around us, in which vastly more is contained than it is possible for any man to record; especially too that the pleasure and the profit to come from its perusal are both so much the greater? In experience too, we are so many centuries in advance of Aristotle."

With this eminent example of Bacon's influence in the department of instruction, I shall close. Were I to cite additional instances, I should be compelled to anticipate much of the following history. In this the connection of our modern realists, their schools of industry, polytechnic schools, and the like, with the doctrines of Bacon, will be so abundantly and so repeatedly demonstrated, as to justify me in styling him the founder and originator of modern realism, and of realistic principles of instruction.

To this admirable exposition of Lord Bacon's contribution to the science of education, in his inductive method of investigating nature, we append, from the "*Essays Civil and Moral*," Essay XXXIX, entitled "*Of Custom and Education*," with explanatory notes and annotations, by Archbishop Whately, contained in the edition lately (1858,) issued by C. S. Francis & Co., New York.

ESSAY XXXIX. OF CUSTOM AND EDUCATION.

Men's thoughts are much according to their inclination ; their discourse and speeches according to their learning and infused opinions ; but their deeds are after¹ as² they have been accustomed : and therefore, as Machiavel well noteth (though in an evil-favored instance,) there is no trusting to the force of nature, nor to the bravery of words, except it be corroborate³ by custom. His instance is, that for the achieving of a desperate conspiracy, a man should not rest upon the fierceness of any man's nature, or his resolute undertakings, but take such a one as hath had his hands formerly in blood : but Machiavel knew not of a friar Clement, nor a Ravillac, nor a Jaureguy, nor a Baltazar Gerard ; yet his rule holdeth still, that nature, nor the engagement of words, are not⁴ so forcible as custom. Only superstition is now so well advanced, that men of the first blood are as firm as butchers by occupation ; and votary⁵ resolution is made equipollent to custom, even in matter of blood. In other things, the predominancy of custom is every where visible, insomuch as a man would wonder to hear men profess, protest, engage, give great words, and then do just as they have done before, as if they were dead images and engines, moved only by the wheels of custom. We see also the reign or tyranny of custom, what it is. The Indians (I mean the sect of their wise men,) lay themselves quietly upon a stack of wood, and so sacrifice themselves by fire : nay, the wives strive to be burned with the corpse of their husbands. The lads of Sparta,⁶ of ancient time, were wont to be scourged upon the altar of Diana, without so much as queching.⁷ I remember, in the beginning of Queen Elizabeth's time of England, an Irish rebel condemned, put

1. After. According to. "That ye seek not *after* your own heart."—Num., xv : 39. "He who was of the bondwoman was born *after* the flesh."—Gal., iv : 23. "Deal not with us *after* our sins"—Liturgy.

2. As. That. See page 23.

3. Corroborate. Corroborated ; strengthened ; made firm.

"His heart is corroborate."—Shakespeare.

4. Nor—Are not. This double negative is used frequently by old writers.

"Nor to no Roman else."—Shakespeare.

"Another sort there be, that will

Be talking of the fairies still,

Nor never can they have their fill."—Drayton.

5. Votary. Consecrated by a vow.

6. Cic. *Tuscul. Dial.*, ii : 14.

7. Quech (properly quich.) To move ; to stir.

"Underre her feet, there as she sate,
An huge great lyon laye, that mote appalle
An hardy courage ; like captived thrall
With a strong iron chain and collar bounde—
Not once he could nor move nor quich."—Spenser.

up a petition to the deputy that he might be hanged in a withe,¹ and not in a halter, because it had been so used with former rebels. There be monks in Russia, for penance, that will sit a whole night in a vessel of water, till they be engaged with hard ice.

Many examples may be put of the force of custom, both upon mind and body; therefore, since custom is the principal magistrate of man's life, let men by all means endeavor to obtain good customs. Certainly, custom is 'most perfect when it beginneth in young years: this we call education, which is, in effect, but an early custom. So we see in languages, the tone is more pliant to all expressions and sounds, the joints are more supple to all feats of activity and motions, in youth, than afterward; for it is true, the late learners can not so well take up the ply, except it be in some minds, that have not suffered themselves to fix, but have kept themselves open and prepared to receive continual amendment, which is exceeding rare; but if the force of custom, simple and separate, be great, the force of custom, copulate, and conjoined, and collegiate, is far greater; for there example teacheth, company comforteth,² emulation quickeneth, glory raiseth; so as in such places the force of custom is in his³ exaltation. Certainly, the great multiplication⁴ of virtues upon human nature resteth upon societies well ordained and disciplined; for commonwealths and good governments do nourish virtue grown, but do not much mend the seeds: but the misery is, that the most effectual means are now applied to the ends least to be desired.

ANNOTATIONS.

"Men's thoughts are much according to their inclinations: their discourse and speeches according to their learning and infused opinions, but their deeds are after as they have been accustomed."

This remark, like many others, Bacon has condensed in Latin into the very brief and pithy apophthegm which I have given in the "*Antitheta on Nature in Men*." "*Cogitamus secundum naturam; loquimur secundum præcepta; sed agimus secundum consuetudinem.*" Of course, Bacon did not mean his words to be taken literally in their utmost extent, and without any exception or modification; as if natural disposition and instruction had nothing to do with conduct. And, of course, he could not mean any thing so self-contradictory as to say that *all* action is the result of custom: for it is plain that, in the first instance, it must be by actions that a custom is formed.

But he uses a strong expression, in order to impress it on our mind that, for practice, custom is the most essential thing, and that it will often overbear both the original disposition, and the precepts which have been learnt: that whatever a man may inwardly think, and (with perfect sincerity) say, you can not fully depend on his conduct till you know how he has been *accustomed* to act. For, continued

1. Withs *Twigs, or bands of twigs* "If they bind me with seven green withs, then shall I be weak."—*Judges*, xvi: 7

2. Comfort. *To strengthen as an auxiliary; to help.* (The meaning of the original Latin word, *Conforto*.) "Now we exhort you brethren, *comfort* the feeble-minded."—1 *Thess.*, v: 14.

3. *His*. ^A But God giveth it a body as it hath pleased Him, and to every seed *his own* body."—1 *Cor.*, xv: 38.

4. Multiplication upon. "Increase and multiply upon us thy mercy."—*Collect for the 4th Sunday after Trinity*.

action is like a continued stream of water, which *wears* for itself a *channel*, that it will not easily be turned from. The bed which the current had gradually scooped at first, afterward confines it.

Bacon is far from meaning, I conceive, when he says that "men speak as they have learned," to limit himself to the case of *insincere* professions; but to point out how much easier it is to learn to repeat a lesson correctly, than to bring it into practice, when custom is opposed to it.

This is the doctrine of one whom Bacon did not certainly regard with any undue veneration—Aristotle; who, in his "*Ethics*," dwells earnestly on the importance of being early accustomed to right practice, with a view to the formation of virtuous habits. And he derives the word "ethics" from a Greek word signifying custom; even as the word "morality" is derived from the corresponding Latin word "*mos*."

It is to be observed that, at the present day, it is common to use the words "custom" and "habit" as synonymous; and often to employ the latter where Bacon would have used the former. But, strictly speaking, they denote respectively the *cause* and the effect. Repeated acts constitute the "custom;" and the "habit" is the condition of mind or body thence resulting. For instance, a man who has been *accustomed* to rise at a certain hour, will have acquired the *habit* of waking and being ready to rise as soon as that hour arrives. And one who has made it his *custom* to drink drams, will have fallen into the *habit* of craving for that stimulus, and of yielding to that craving; and so of the rest.

Those are, then, in error who disparage (as Mrs. Hannah More does) all practice that does not spring from a formed habit. For instance, they censure those who employ children as almoners, handing them money or other things to relieve the poor with. For, say they, no one can *give* what is not his own; there is no charity, unless you part with something that you might have kept, and which it is a self-denial to part with. The answer is, that if the child does this readily and gladly, he has *already learnt* the virtue of charity; but if it is a *painful* self-denial which you urge him to, as a duty, you are creating an association of charity with pain. On the contrary, if you accustom him to the pleasure of seeing distress relieved, and of being the instrument of giving pleasure, and doing good, the desire of this gratification will lead him, afterward, to part with something of his own, rather than forego it. Thus it is—to use Horace's comparison—that the young hound is trained for the chase in the woods, from the time that he barks at the deer-skin in the hall.¹

The precept is very good, to begin with swimming with corks.

There is an error somewhat akin to the one I have been combating, which may be worth noticing here. Declamations are current in the present day against the iniquity of giving a bias to the minds of young persons, by teaching them our own interpretation of the Sacred Volume, instead of leaving them to investigate for themselves; that is, against endeavoring to place them in the same situation with those to whom those very Scriptures were written; instead of leaving them to struggle with difficulties which the Scriptures nowhere contemplate or provide against. The maintainers of such a principle would do well to consider, whether it would not, if consistently pursued, prove too much. Do you not, it might be asked, bias the minds of children, by putting into their hands the Scriptures them-

1. "Venaticus, ex quo
Tempore cervinam pellam latravit in aula,
Militat in silvis catulus."—Book *Horace*, l. ep. 2, l. 65.

selves, as the infallible word of God? If you are convinced that they are so, you must be sure that they will stand the test of unprejudiced inquiry. Are you not, at least, bound in fairness to teach them, at the same time, the systems of ancient mythology, the doctrines of the Koran, and those of modern philosophers, that they may freely choose amongst all? Let any one who is disposed to deride the absurdity of such a proposal consider whether there is any objection to it, which would not equally lie against the exclusion of systematic religious instruction, or, indeed, systematic training in any science or art. It is urged, however, that since a man must *wish* to find the system true in which he has been *trained*, his judgment must be unduly biased by that wish. It would follow, from this principle, that no physician should be trusted, who is not utterly indifferent whether his patient recovers or dies, and who is not wholly free from any favorable hope from the mode of treatment pursued; since, else his mind must be unfairly influenced by his wishes!

"The predominancy of custom is every where visible; inasmuch as a man would wonder to hear men profess, protest, engage, give great words, and then do just as they have done before; as if they were dead images and engines, moved only by the wheels of custom."

This "predominancy of custom" is remarkably exemplified in the case of soldiers who have long been habituated to obey, as if by a mechanical impulse, the word of command.

It happened, in the case of a contemplated insurrection in a certain part of the British Empire, that the plotters of it sought to tamper with the soldiers who were likely to be called out against them; and, for this purpose, frequented the public houses to which the soldiers resorted, and drew them into conversation. Reports of these attempts reached the officers; who, however, found that so little impression was made, that they did not think it needful to take any notice of them. On one occasion it appeared that a sergeant of a Scotch regiment was so far talked over as to feel and express great sympathy with the agitators, on account of their alledged grievances, as laid before him by the seducer. "Weel, now, I did na ken that; indeed, that seems uncoo hard; I can na wonder that ye should complain o' that." &c., &c.

The other, seeking to follow up his blow, then said: "I suppose now such honest fellows as you, if you were to be called out against us, when we were driven to rise in a good cause, would never have the heart to *fire* on poor fellows who were only seeking liberty and justice." The sergeant replied (just as he was reaching down his cap and belt, to return to barracks,) "*I'd just na advise ye to try!*"

He felt conscious—miled as he had been respecting the justice of the cause—that, whatever might be his private opinions and inward feelings, if the word of command were given to "make ready, present, fire," he should instinctively obey it.

And this is very much the case with any one who has been long drilled in the ranks of a *party*. Whatever may be his natural disposition—whatever may be the judgment his unbiased understanding dictates on any point—whatever he may inwardly feel, and may (with perfect sincerity) have said—when you come to action, it is likely that the habit of going along with his party will prevail. And the more *general and indefinite* the purpose for which the party, or society (or by whatever name it may be called) is framed, and the less *distinctly specified* are its objects, the more will its members be, usually, under the control and direction of its leaders.

I was once conversing with an intelligent and liberal-minded man, who was expressing his strong disapprobation of some late decisions and proceedings of the leading persons of the society he belonged to, and assuring me that the greater part of the subordinates regarded them as wrong and unjustifiable. "But," said I, "they will nevertheless, I suppose, *comply*, and act as they are required?" "Oh, yes, they *must* do that!"

Of course, there are many various *degrees* of partisanship, as there are also different degrees of custom in all other things; and it is not meant that all who are in any degree connected with any party must be equally devoted adherents of it. But I am speaking of the tendency of party-spirit, and describing a party-man *so far forth* as he is such. And persons of much experience in human affairs lay it down accordingly as a maxim, that you should be very cautious how you fully *trust* a party-man, however sound his own judgment, and however pure the principles on which he acts, when left to himself. A sensible and upright man, who keeps himself quite unconnected with party, may be *calculated* on as likely to *act* on the views which you have found him to take on each point. In some things, perhaps, you find him to differ from you; in others to agree; but when you have learnt what his sentiments are, you know in each case what to *expect*. But it is not so with one who is connected with, and consequently controlled by, a party. In proportion as he is so, he is not fully his own master; and in some instances you will probably find him take you quite by surprise, by assenting to some course quite at variance with the sentiments which you have heard him express—probably with perfect sincerity—as his own. When it comes to action, a formed habit of following the party will be likely to prevail over every thing. At least, "*I'd just na advise ye to try!*"

It is important to keep in mind that—as is evident from what has been said just above—habits are formed, not at one stroke, but gradually and insensibly; so that, unless vigilant care be employed, a great change may come over the character, without our being conscious of any. For, as Dr. Johnson has well expressed it, "The diminutive chains of habit are seldom heavy enough to be felt, till they are too strong to be broken."

And this is often strongly exemplified in the case just adverted to—that of party-spirit. It is not often that a man, all at once, resolves to join himself to a party; but he is drawn in by little and little. Party is like one of those perilous whirlpools sometimes met with at sea. When a vessel reaches the outer edge of one of them, the current moves so slowly, and with so little of a curve, that the mariners may be unconscious of moving in any curve at all, or even of any motion whatever. But each circuit of the spiral increases the velocity, and gradually increases the curve, and brings the vessel nearer to the center. And perhaps this rapid motion, and the direction of it, are for the first time perceived, when the force of the current has become irresistible.

"It is true that a man *may*, if he will, withdraw from, and disown, a party which he had formerly belonged to. But this is a step which requires no small degree of moral courage. And not only are we strongly tempted to shrink from taking such a step, but also our dread of doing so is likely rather to mislead our reason than to overpower it. A man will *wish* to think it justifiable to adhere to the party; and this wish is likely to bias his judgment, rather than to prevail on him to act contrary to his judgment. For, we know how much the judgment of men is likely to be *biased*, as well as how much they are tempted to acquiesce in something *against* their judgment, when earnestly pressed by the majority of

those who are acting with them—whom they look up to—whose approbation encourages them—and whose censure they can not but dread.

"Some doctrine, suppose, is promulgated, or measure proposed, or mode of procedure commenced, which some members of a party do not, in their unbiased judgment, approve. But any one of them is disposed, first to *wish*, then to *hope*, and lastly to *believe*, that those are in the right whom he would be sorry to think wrong. And again, in any case where his judgment may still be unchanged, he may feel that it is but a *small* concession he is called on to make, and that there are *great* benefits to set against it; and that, after all, he is perhaps called on merely to *acquiesce silently* in what he does not quite approve; and he is loth to incur censure, as lukewarm in the good cause—as presumptuous—as unfriendly toward those who are acting with him. To be "a breaker up of the Club" (*τραίπας διαλύτης*) was a reproach, the dread of which, we learn from the great historian of Greece, carried much weight with it in the transactions of the party warfare he is describing. And we may expect the like in all similar cases.

"One may sometimes hear a person say, in so many words—though far oftener in his conduct—'It is true, I do not altogether approve of such and such a step; but it is insisted on as essential, by those who are acting with us; and if we were to hold out against it, we should lose their co-operation; which would be a most serious evil. There is nothing to be done, therefore, but to comply.'"

"*Certainly custom is most perfect when it beginneth in young years: this we call education, which is, in effect, but an early custom.*"

Education may be compared to the grafting of a tree. Every gardener knows that the *younger* the wilding-stock is that is to be grafted, the easier and the more effectual is the operation; because, then, one scion put on just above the root, will become the main stem of the tree, and all the branches it puts forth will be of the right sort. When, on the other hand, a tree is to be grafted at a considerable age (which may be very successfully done,) you have to put on twenty or thirty grafts on the several branches; and afterward you will have to be watching from time to time for the wilding-shoots, which the stock will be putting forth, and pruning them off. And even so one, whose character is to be *reformed* at mature age, will find it necessary, not merely to implant a right principle once for all, but also to bestow a distinct attention on the correction of this, that, and the other bad habit.

It is wonderful that so many persons should confound together being accustomed to certain *objects*, and accustomed to a certain mode of *acting*. Aristotle, on the contrary, justly remarks that opposite habits are formed by means of the same things (*ἐκ τῶν αὐτῶν, καὶ διὰ τῶν αὐτῶν*.) treated in opposite ways; as, for instance, humanity and inhumanity—by being accustomed to the view of suffering, with and without the effort to relieve it. Of two persons who have been accustomed to the sight of much human misery, one, who has been used to pass it by without any effort to relieve it, will become careless and hardened to such spectacles; while another, who has been in the practice of *relieving* sufferers, will acquire a strong habit of endeavoring to afford relief. These two persons will both have been accustomed to the same *objects*, but will have acquired opposite *habits*, from being accustomed to *act* in opposite ways.

Suppose that there is in your neighborhood a loud bell, that is rung very early every morning, to call the laborers in some great manufactory. At first, and for some time, your rest will be broken by it; but, if you accustom yourself to lie still, and try to compose yourself, you will become, in a few days, so *used*

to it, that it will not even wake you. But any one who makes a point of rising immediately at the call, will become *so used to it* in the *opposite* way, that the sound will never fail to rouse him from the deepest sleep. Both will have been accustomed to the same bell, but will have formed opposite habits from their contrary modes of action.

But it must not be forgotten that education resembles the grafting of a tree in this point, also, that there must be some affinity between the stock and the graft, though a very important practical difference may exist; for example, between a worthless crab, and a fine apple. Even so, the new nature, as it may be called, super-induced by education, must always retain some relation to the original one, though differing in most important points. You can not, by any kind of artificial training, make *any* thing of *any* one, and obliterate all trace of the natural character. Those who hold that this *is* possible, and attempt to effect it, resemble Virgil, who (whether in ignorance or, as some think, by way of "poetical license,") talks of grafting an oak on an elm: "*glandesque sues fregere sub ulmis.*"

One of Dr. Johnson's paradoxes, more popular in his time than now, but far from being now exploded, was, that a given amount of ability may be turned in any direction, "even as a man may walk this way or that." And so he can; because walking is the action for which the legs are fitted; but, though he may use his eyes for looking at this object or that, he can not hear with his eyes, or see with his ears. And the eyes and ears are not more different than, for instance, the poetical faculty, and the mathematical. "Oh, but if Milton had turned his *mind* to mathematics, and if Newton had turned his mind to poetry; the former might have been the great mathematician, and the latter the great poet." This is open to the proverbial reply, "If my aunt had been a man, she would have been my uncle." For, the supposition implied in these *ifs* is, that Milton and Newton should have been quite different characters from what they were.

" . . . *Minds that have not suffered themselves to fix, but have kept themselves open and prepared to receive continual amendment, which is exceeding rare.*"

And as admirable as it is rare. Such minds may indeed print their opinions, but do not stereotype them. Nor does the self-distrust, the perpetual care, the diligent watchfulness, the openness to conviction, the exercise of which is implied in Bacon's description, necessarily involve a state of painful and unceasing doubt. For, in proportion as a man is watchfully and prayerfully on his guard against the unseen current of passions and prejudices, which is ever tending to drive him out of the right course, in the same degree he will have reason for cherishing an humble hope that He, the Spirit of Truth, is, and will be, with him, to enlighten his understanding, to guide his conduct, and to lead him onward to that state in which Faith shall be succeeded by sight, and hope by enjoyment.

"*The force of custom, copulate, and conjoined, and collegiate, is far greater.*"

For this reason it is, that what is said or done by very inferior persons, is the best sign of what is *commonly* said or done in the place and time in which they live. A man of resolute character, and of an original turn of thought, being more likely to resist this force of "copulate and collegiate custom," does not furnish so good a sign of what are the *prevailing* opinions and customs. Hence the proverb:—

"A straw best shows
How the wind blows."

A bar of heavy metal would not be perceptibly influenced by the wind.

I wish I could feel justified in concluding this head without saying any thing of Bacon's own character; without holding him up as himself a lamentable example of practice at variance with good sentiments, and sound judgment, and right precepts. He thought well, and he spoke well; but he had *accustomed* himself to act very far from well. And justice requires that he should be held up as a warning beacon to teach all men an important lesson; to afford them a sad proof that no intellectual power—no extent of learning—not even the most pure and exalted moral sentiments, confined to theory, will supply the want of a diligent and watchful conformity in practice to christian principle. All the attempts that have been made to vindicate or palliate Bacon's moral conduct, tend only to lower, and to lower very much, the standard of virtue. He appears but too plainly to have been worldly, ambitious, covetous, base, selfish, and unscrupulous.¹ And it is remarkable that the Mammon which he served proved but a faithless master in the end. He reached the highest pinnacle, indeed, to which his ambition had aimed; but he died impoverished, degraded, despised, and broken-hearted. His example, therefore, is far from being at all seductive.

But let no one, thereupon, undervalue or neglect the lessons of wisdom which his writings may supply, and which we may, through divine grace, turn to better account than he did himself. It would be absurd to infer that, because Bacon was a great philosopher, and far from a good man, therefore you will be the better man for keeping clear of his philosophy. His intellectual superiority was no more the cause of his moral failures, than Solomon's wisdom was of his. You may be as faulty a character as either of them was, without possessing a particle of their wisdom, and without seeking to gain instruction from it. The intellectual light which they enjoyed did not, indeed, keep them in the right path; but you will not be the more likely to walk in it, if you quench any light that is afforded you.

The Canaanites of old, we should remember, dwelt in "a good land, flowing with milk and honey," though they worshiped not the true God, but served abominable demons, with sacrifices of the produce of their soil, and even with the blood of their children. But the Israelites were invited to go in, and take possession of "well-stored houses that they builded not, and wells which they digged not;" and they "took the labors of the people in possession:" only, they were warned to beware, lest, in their prosperity and wealth, they should "forget the Lord their God," and to offer to Him the first fruits of their land.

Neglect not, then, any of the advantages of intellectual cultivation, which God's providence has placed within your reach; nor "think scorn of that pleasant land," and prefer wandering by choice in the barren wilderness of ignorance; but let the intellect, which God has endowed you with, be cultivated as a servant to *Him*, and then it will be, not a master, but an useful servant, to *you*.

1. This censure of Bacon has actually been complained of as undeserved; not on the ground that his *conduct* was any better than it is but too well known to have been, but on the ground that his *writings* contain excellent views of Gospel truth!

This is exactly the doctrine of the ancient Gnostics; who held that their (so-called) *knowledge* [Gnosis] of the Gospel would save them, though leading a vicious life.

But, when instances of such teaching in our own days are adduced (as unhappily may be done to a great extent,) some persons—including some who are themselves of blameless life—resolutely shut their ears to evidence, and will not be brought to perceive, or at least to acknowledge, that any such thing as Gnosticism exists among us, or that we are in danger of antinomian doctrine.

So strong is the force of party!

IV. THE REAL SCHOOLS OF GERMANY.

[Translated from the German of Karl von Raumer for this Journal.]

DURING the seventeenth century, pedagogical realism gained more and more ground in the schools of learning, as is shown by the introduction of the school-books of Comenius. These were brought into the gymnasium at Hersfield, in 1649. In the Dantzic Gymnasium, according to the plan of study for 1653, the *Vestibulum* and *Janua* of Comenius were to be read; in those of Stargard and Nuremberg, the *Orbis Pictus*.

In the use of these books, however, the thing sought for appears to have been a *copia vocabulorum*, with especial regard to the speaking of Latin. The pictures were used rather as a mnemonic help for fixing the words in the memory, than according to the idea of Comenius, as means of becoming acquainted with the things themselves.

The things, however, imperceptibly asserted their proper place. Feuerlein remarks, that complaint had been made of the want of a good vocabulary or *nomenclator*; and about the *Orbis Sensualium* of Comenius, which up to that time had been almost the only work of the kind. This contained the Latin of tailors, weavers, shoemakers, cooks, and butlers, unlatin phrases and barbarisms; and, on the other hand, lacked the most necessary words, particles, &c.* The *Libellus memorialis* of Cellarius was introduced in the place of the *Orbis Pictus*, to remedy this defect. But this school-book, which was of printed matter only, gave no better satisfaction; men had become used to the pictures of Comenius, and to his world of real things. Thus, Feuerlein says: "men might set about some wood-cuts or copper-plates, in which the several things which youth were learning might at least be placed in *effigie* before their eyes, and under each, what they are, or for what they are used, might be written; of which they might memorize the Latin names, and thus might fix words in their memories in relation to which they did not know what the thing is, or what the word means. * * * Besides, it would not be a

* Feuerlein relates that when a scholar asked Conrector Manner, "Master, what is the Latin for Kugel-Hüpflein?" (a sort of cake,) he answered, "You fool, do you suppose that Cicero ever ate a Kugel-Hüpflein?" That is, where is the use of learning Latin words which do not appear in the classics?

bad plan," he continues, "to take some of the boys, from time to time, upon walks into the fields and gardens, to forges, saw mills, paper mills, &c., or to workshops of all kinds; to show them the tools, and tell them what are their names, and what is done with them; and then to ask them what are the Latin names of this or that, which they see in *substantia* before their eyes; or to tell them to them. This would not only impress the words much better upon their memories, while they would not otherwise learn them without vexation, since they do not understand them in German, or know what the thing is; but also this knowledge would serve a good turn in every-day life; in which the educated man often appears so ignorant and ill-informed upon subjects which are always coming up in ordinary conversation."

Something of life was beginning to make itself felt all through the schools.

Although the *Orbis Pictus* was disused in the Nuremberg Gymnasium, the Vestibulum of Comenius was yet retained there in the two lowest classes. In the same direction was tending most of the realist instruction in mathematics, which is called, in the plan of study given by Feuerlein, *mathesis juvenilis*, and which passed through five classes.

Sturm's class-book,* which was used for this purpose, is largely furnished with copper-plates, and includes general mathematics, practical arithmetic, theoretical and practical geometry, (field surveying, measuring altitudes, and stereometry,) optics, military and civil architecture, cosmography, chronology, dialing, mechanics, and, last of all, chiromancy! The elements of these studies are contained upon seventy-nine folio pages. Feuerlein praises highly Sturm's mathematical method; one would think one was listening to a scholar of Pestalozzi. "In it," he says, "there is no learning by rote of the one-times-one, as is customary in the German schools, without understanding it; but they learn themselves to make it, and to fix their understanding on it with reason and good apprehension of it. Here is learned the *diœti*, the basis of the rules, why they do so and so; in the German schools only the *œti* is taught; how to proceed, without knowing the basis of the proceedings, the why. In the latter case the work would seem to be almost entirely one of memory, rather than of reason." He then goes on to praise it,—and this is what we have special regard to; that the boys "learn so skillfully to use the compasses, the square, the measuring-rod, &c., and that, after a few exercises, they learn, quickly and neatly, to estimate by the eye alone, the size of a table, a window, a room, a house, &c."

* The title is: "*Johannis Christophori Sturmii mathesis compendiaria sive tyrocinum mathematica.*" I have before me the sixth edition in folio, Coburg, 1714; edited by Sturm's son, Leonhard Christoph Sturm.

According to Sturm's preface to his book, it was introduced into various German gymnasiums.

Pastor Semler, of Halle, went still one step further.* In 1739, he published an account called "*Upon the Mathematical, Mechanical, and Agricultural Real School in the city of Halle*, approved and re-opened by the royal Prussian government of the Duchy of Magdeburg, and the Berlin royal society of sciences."†

So far as I know, this is the first time that the name and the idea of the *real* school appear. Besides religious instruction, according to Semler, youth are to be instructed in knowledge which is useful and entirely indispensable in every-day life; and, in particular, all visible things are to be shown to them, whether in nature or by means of all manner of pictures. "A description of Rome in a book," he says, "gives the faintest notion of the city; a more lively one is given by an oral description, from one who has lived long in Rome; the liveliness of this impression is increased by copper-plates, paintings, or models; but to see the city with one's own eyes gives a most perfect knowledge. His rule has been, for forty years, *Non scholæ sed vitæ discendum*. In *real* life is needed a knowledge of weight, size, of the use of circles and lines, of the almanac, astronomy, and geography. There is also needed: "Knowledge of some physical things, such as metals, minerals, common stones, and precious stones, woods, colors, drawings, farming, gardening, book-keeping, something of anatomy and regimen, the most necessary parts of police regulations, the history of the country, from the Halle Chronicle and other authors; the map of all Germany, and those of the Duchy of Magdeburg, and of the cities and towns lying about Halle, which will be the subject of conversation very often in daily life; for this sort of knowledge is much more important than to know in what part of the world are Dublin, Astrakhan, and Adrianople."

We have here not only an enumeration of most of the real subjects which were afterward taught in the real schools, but also the fundamental principle appears here which was the leading one of Rousseau and Pestalozzi; that, first of all, that must be learned which is required by the immediate present, by daily life.

Among the professors at Halle, Semler mentions Chr. Thomasius, Cellarius, Hofmann the physician, and the philosopher Wolf, as those who approved his principles. In 1706, he presented his school pro-

* Christoph Semler, a Lutheran preacher, was born in Halle, in 1669; read lectures there; in 1697 became a magistrate, in 1699 Inspector of the poor schools; was principal deacon of the church of St. Ulrich, and member of the Berlin Academy of Sciences. He died in 1740. Jücher says, "He was a man of great science in mechanics and mathematics."

† This appeared in the "*Halle Advertiser*," from which it was taken for the "*Acta Historica Ecclesiastica*," (1740, Vol. XIX., p. 198.)

posals to the government of Magdeburg, which entered into them with approval. The Berlin society of sciences, being applied to by that government upon the subject, answered on the 15th of December, 1706; that provided schools were established for the training up of state and church officers, it would be well for such boys as now attend only the German schools, "to be instructed in an actual mechanical school, so that their understandings and senses might be more developed; and especially that they might become acquainted with common materials and subjects, their value and price, with the common proportions of circles, lines, angles, and weight, as well as with different sizes and their measurement, with weighing, and upon opportunity with the simple microscope, for the better understanding of the constituents of bodies; and with the use of other useful instruments, together with tools and levers; to the end that this knowledge might serve them for improved understanding and practices, and to the invention of new and useful modes of using them. Thus it can be seen that there would be attained by such scholars, good proportions in their work, a steady hand, and the like advantages, such as are derived from a more intelligent use of the outward senses, which are the foundation of all the skill which nature can offer and practice can perfect."

Semler, now assisted by the city, caused twelve poor boys to be instructed in his house, by a "literary man, well experienced in mathematics, mechanics, and agriculture;" but his plan lasted only for a year and a half. In this course of instruction, "sixty-three single objects were displayed before their eyes," chiefly by models.* In 1738, these ocular demonstrations were resumed. These were placed before the scholars, says Semler, "to see, not exotic things and objects of curiosity, but only things daily necessary, and such as possess the most immediate utility in every day life. By this method, the schools, which have been verbal schools hitherto, will become real schools, since information will be given in them no more by means purely abstract, universal, and intellectual. The elementary information of little children should be given to them without books, from things themselves." Books should merely serve for repetition, and the ideas of things are to be adjoined to words. The schools, hitherto rooms of martyrdom, will, by the introduction of realities into them, become real pleasure rooms. Semler was seventy years old when he wrote these words. It would be an error to consider him, from what has above been said, an entirely earthly-minded ma-

* Sometimes by very strange ones. Thus there was a machine "which demonstrated the true reason of the rise and fall of the tide."

terialist realist, as so many of his successors were. He did not desire to remain permanently in the realm of the material, but, as he says, "to ascend from the creature to the Creator;" and he prays for the gift of enlightened eyes, which may penetrate within the penetralia of the creature. In conclusion, the pious old man, with the Psalmist, praises the works of God. "Blessed is he," he says, "who knows them holily; and twice blessed, he who holily takes pleasure in them, and thanks him for them, from the bottom of his heart."*

It has been remarked that in Francké's school there were various real studies, as botany, turning, and the like. Should not Semler, brought into such close communion with Francké, as teacher in the University of Halle, and as preacher and instructor of the German schools, have had an influence upon the improvements in teaching in the Pædagogium and Orphan-house by his pedagogical realism? It is worthy of remark, that from Francké's school came Johann Julius Hecker, who, in 1747, established the first important real school in Berlin; as did his successor in the same school, Johann Elias Silberschlag.

In treating of the stronger and stronger growth of realism, a distinction of it must be made, into two kinds. On the one hand, real studies, before entirely suppressed by the study of language, began to be more correctly estimated, and attempts were made to introduce them into the learned schools. And, on the other hand, the conviction grew, that in these schools the instruction was proper for such boys as were intended for the learned professions, and only for such, and that all other scholars were obliged to learn, and that in a superficial manner, things which could be of no use to them in after life. It was clear that, for scholars not intending a life of study, real knowledge was far more valuable than a mere purposeless beginning with Latin. The answer of the Berlin academy in the matter of Semler shows as much. Rector Gesner, of Rotenburg, in 1720, wrote to the same effect: "The one class, who will not study, but will become tradesmen, merchants, or soldiers, must be instructed in writing, arithmetic, writing letters, geography, description of the world, and history. The other class may be trained for studying." Schöttgen, rector in Dresden, wrote, in 1742, a "*Humble proposal for the special class in public city schools.*" In these schools, he says, every one is arranged with a view to the learning of Latin, and children, "who are to remain without Latin," are entirely forgotten. They are forced to learn Donatus and the grammar, which are useless for them; and

* I have, up to this time, been unable to learn further particulars about Semler. Schulz, ("*Rheinische Gazette*," March and April, 1842, p. 169,) speaks cursorily of "Semler's sad experiences at Halle."

they do not study what would be useful to mechanics, artists, or merchants. Of what use will it be to such, to have learned *anthrax, colax, &c.*? State and country need, not only people who know Latin, but others also. For these reasons he advises to organize a special class for such. "My proposal," he says, with resignation, "is already rejected before it has been brought to light. But, if what there is in it is not yet ripe, we will wait until the time comes for it."

Rector Henzky of Prenzlau, already mentioned, wrote, in 1751, a treatise "*That real schools can and must become common*;" and the learned and cautious Joh. Matthias Gesner expressed himself thus: "It is a common fault of most of our schools, that in them provision is made only for such as intend to become what are called learned men by profession; and thus a complete acquaintance with Latin is required of all young people, without any distinction. On the contrary, those things are for the most part neglected, which would be indispensable, or at least useful, in common civil life, in the arts and professions, at court and in war. * * * A well-organized gymnasium should, on the contrary, be so arranged that youth, of every extraction, age, character, and distinction, may find their account there, and be taught in them for the common good. Youth may be, with reference to their future life, divided into three classes. 1. Those who are to learn trades, arts, or to be merchants; 2. Those who are to seek their fortune at court or in war; and, 3. Those who are to remain students, and to go to the university."*

Thus many wise men demanded that regard should be had, not only exclusively and uniformly to the education of students, but also to that of children who were "to remain without Latin." But the question how to bring this to pass, was a difficult one to answer.

According to Gesner's view, each gymnasium must solve the problem of educating all these entirely different classes of children. But it is evident how difficult of solution it must have been; and how great was the danger, that the endeavor to comply with the most various requirements, would result in satisfying none of them, and becoming quite characterless.

But why such mixed schools? asked others. Would it not be better to erect separate institutions, perhaps not for every pursuit not literary, but for them all together? These questions may have become more important, as the confusion in the gymnasium from their attempt to attain different ends increased, and the conviction grew,

* J. M. Gesner, *Minor German Works*, p. 355. As these appeared in 1756, Gesner's "*Thoughts on the Organization of a Gymnasium*," from which the extract in the text is taken, must have been written before that time. His plan of a gymnasium includes those three classes, for the accommodation of pupils.

that each school should have but one principle, one aim, one character.

The history of the Berlin real school is very instructive in this connection, as furnishing a series of attempts to unite and bring into harmony with each other, humanist and real studies; the instruction of those who were and were not to become men of learning.

I have named Julius Hecker as the founder of this school.* He was appointed preacher at the Church of the Trinity, in Berlin, in 1739, and at the same time became instructor of the German schools belonging to the parish. He considered institutions of instruction the seed-beds of the state, from which the young, like trees from a nursery, could be transplanted into their proper places. He therefore wished for schools which should prepare for learned studies; and others which should train for the position of citizens, artisans, soldiers, and land-owners; and others for farmers and day-laborers. In accordance with this view, he organized the real school, which he established in 1747. It consisted of three schools, partly subordinated and in part co-ordinate; of the German school, the Latin school, and the real school proper. Scholars from the Latin and German schools might receive instruction in the real school also. In the latter were taught arithmetic, geometry, mechanics, architecture, drawing, and the knowledge of nature. A knowledge of the human body was especially taught, then plants and minerals, and instruction was given in the cultivation of mulberry trees and silk-worms, and the scholars were taught by being taken to workshops. Among the classes were a manufacturing class, an architectural class, an agricultural class, a book-keeping class, and a mining class.†

The organization of the Latin school presents nothing particular. The pupils were taught weekly, Latin twelve hours, French and other languages five hours; and the boys received besides various kinds of real instruction, and were overwhelmed with lessons. Except from twelve to one, instruction was given from seven in the morning to seven at night.

In 1753, J. F. Halm became teacher of the real school; who taught by means of intuition, after Semler's manner. For this purpose a large collection of real objects was used, among which were models of buildings, ships, chests, plows, churns, columns of the different orders, pictorial representations of an entire Roman triumphal procession, collections of merchandise, a miniature shop, a pharma-

* The information here following is mostly from Principal Schulz's "*History of the Real School in Berlin*." See Diesterweg's "*Rheinische Blätter*," Vols. XXV. and XXVI., 1842.

† In 1748, a boarding-house was attached to the school, in which the first boarder was Friedrich Nicolai.

cological collection, specimens of leather, &c., &c. There was also a botanical garden adapted to the real school, and a plantation of mulberries.

Hecker and Hälm laid their pedagogical views before the public. The former, among other works, wrote, in 1749, one entitled "*A sincere proposal how the Latin tongue may be maintained in worth and honor.*"* He says, "it is in vain that we strive to keep the Latin upon its ancient throne; juridical and medicinal examinations and examinations of candidates show into what a low estate it has fallen." His advice is, to pursue real studies until the eleventh or twelfth year, and then to begin Latin.

Hälm wrote, "*How to collect in real schools what is necessary and useful of languages, arts, and sciences, 1753.*" He advised to give children not only oral descriptions, but also to show them things themselves, either in their natural form or in models and pictures. From his treatise will appear the connection between the specimens of leather above mentioned, and the class in manufacturing. "In the class in manufactures," he says, "they began at Christmas with the art of working in leather. To pursue this study in a manner to make it useful and practical in future life, a collection of all kinds of leather is necessary. There might be shown to youth for instruction, more than ninety kinds of leather, each piece perhaps as large as an octavo page. Among these might be all kinds of sole-leather, calves' leather, and that of cows, horses, and sheep; similar pieces of goat-skin, deerskin, doeskin, buckskin, Cordovan, Morocco, Russia, and other kinds."

Julius Hecker died in 1768; and Hälm had left the school in 1759.

From the foregoing it seems clear, that there had not been enough difference, in the real schools, between the studies of those who were to be students and of those who were not; between literary studies and real studies. This occasioned the unheard of number of eleven hours of study daily; which was made necessary by the crowd of objects of instruction. It however also appears, from the same, that Hecker not only was true to his "chief principle, *non scholæ sed vitæ discendum*, but that he pushed it from a misunderstanding, even to caricatures.

The school should prepare well for life, but should not anticipate it; it should not undertake to teach what life only teaches or can teach. Hälm's words, above quoted, "At Christmas we began with the art of working in leather," must appear silly to every intelligent

* Ancient and Modern Schools, collected by Biedermann, 1762, Part VI.

man. Is this the meaning of the wise maxim, *non scholæ sed vitæ discendum*? Had the real idea of life become wholly lost in that hard and dead period?

After the death of Hecker, Johann Elias Silberschlag, known as a mathematician and naturalist, became director of the institution.* He seems to have in view a more popular distinction of the three institutions here united under the common name of "real school." He gave to the three the names of Pædagogium, art school, and German or artisans' school.

The German school was the elementary school for all, but had also an especial class in trades. In the art school, the students laid the foundation of a knowledge of mathematics, Latin, and French, although this school was particularly intended for workmen, farmers, and others not proposing to study. The teachers of mathematics in this school gave as rules, "Axioms and theorems which did not require theoretical acuteness;" these being needed in the Pædagogium. In this there were two theoretical-mathematical classes; in the lower of which arithmetic was taught, in the other algebra. The other studies of the Pædagogium were the usual ones of the higher gymnasium class. Silberschlag leaving in 1784, Andreas Jacob Hecker succeeded him in his office. An education for special pursuits was more and more aimed at in the artisans' school; there were given in it special lectures to future miners and smelters, and particularly for those preparing to become practical geometers, artilleryists, foresters, farmers, merchants, &c. Some hours weekly were even devoted to instruction in German; "in order to make those, who shall wish in future to engage as secretaries to high boards of authorities in the country, better acquainted with the course of business." Thus the real school of arts was a gathering of the most dissimilar schools for special pursuits. "The idea rises of necessity," says the historian of the school, "that where the endeavor is to reach every one, but little will be actually attained. And this was the fact with our real school."

During the same time, the Pædagogium, under Hecker, acquired more the peculiar character of a literary school. In 1797, on the occasion of its fiftieth anniversary festival, it took the name of the Friedrich Wilhelm's Gymnasium; and, in the year 1811, it was finally separated from the real school, in respect to its teachers and its lectures.† Long and hard experience had at last brought the conviction that the previous close connection of the two institutions was a *mésalliance*, by which both lost their independence of character.

* It is characteristic of the man, that he was at the same time a consistorial counselor and high counselor of public buildings.

† That is, from the real school in its more proper sense; the school of arts of Silberschlag.

The purposes of the two institutions being so different, it was necessary that the teaching in real studies in the gymnasium must be entirely distinct from that in the real schools; and the instruction in language in the real school from that in the gymnasium. There must be a distinction in selection, method, and design.

One observation suggests itself here. Gymnasiums are, as to their instruction, really and clearly distinct universities, in this; that they look only to the general education, as the foundation for instruction in all vocations, while the universities are characterized by study in the faculties, and thus prepare for the entrance into real life. It was with justice that great displeasure was manifested, when, at the end of the last century, a master required that future jurists, in the gymnasium, should study, instead of Tacitus and Virgil, the institutions of Heineccius. The gymnasium knows no professional studies, and should know of none; lest it should forcibly communicate, to immature boys, a professional education without any real basis.

Does this same distinction apply to real schools? was it not the greatest of mistakes, that in the Berlin school direct instruction was given for miners, farmers, &c., &c.?

Such a purpose was that of the excellent Spilleke, who assumed the direction of the real school in 1820.* His opinion was, that this school should, in its higher classes, "give or at least introduce to such an education as, without pretending to thorough classic studies, should prepare for the higher relations of society; but a more special preparation, such as was aimed at in earlier times in this part of the school, is not proper."

If we understand Spilleke here, he suggests new questions. If the real schools must correspond with the gymnasiums, how must those real studies be organized which correspond with the universities; in which the real scholars intend to finish their studies?

Are our polytechnic schools and higher industrial schools true "real" universities? Do they, by virtue of the great variety of their studies in arts and trades, become divided into parts which correspond to the faculties of the universities? Or are such "real" universities not practicable, and must there be a special school for each trade, because most occupations have some peculiar elements in their life? The miner must ultimately be trained in the mine, the sailor on the sea, the farmer in the country; but all three can receive their general preparatory training in the same real school. And indeed,

* A. J. Hecker died in 1819, and was followed by Bernardi, who died the next year. After him came Spilleke, who was succeeded, after his death, in 1841, by F. Ranke, distinguished both as an educator and a man of learning.

if students of many arts and trades should enjoy primary instruction, whether carried more or less far, should not this be followed by a purely practical study and drill in the pursuit, under the guidance of skillful masters; and should not their more complete artistic or scientific training come after these years of apprenticeship?

But I must not too far transgress my limits as a historian. When rector Schöttgen, in 1742, published his "*Modest proposal*," for making suitable provision for the instruction of children who are not to study Latin, he hopelessly added, as we have seen, "My proposal is already rejected, before it has been brought into the light." But encouraging himself, he went on: "But yet, if what is proposed therein is not yet ripe, we will wait until its time shall come."

The old rector prophesied rightly. One century after he wrote, there were, in the Prussian states alone, forty-two real institutions, to one hundred and twenty-six gymnasiums.

[To enable our readers, who may not have access to Bache's "*Education in Europe*," or to Barnard's "*National Education in Europe*," we transfer from the latter the following account of a Real School, and Art Institute of our day, in Prussia, as compared with a Gynasium of the highest grade.—Ed.]

FREDERICK WILLIAM GYMNASIUM OF BERLIN.

This institution dates from 1797, and was at first an appendage to the "real school" of Mr. Hecker. It is now a royal institution, and is independent of the real school, except so far that it has the same director, and that the preparatory classes are in the real school, in which, or in other equivalent schools, the pupils are taught until ten years of age. The qualifications for admission are those contained in the general account of the gymnasia. This gymnasium had, in 1837, four hundred and thirty-seven pupils, divided into six classes, and instructed by fourteen teachers and six assistants. The second and third classes are subdivided into two parts, called upper and lower, pursuing different courses, and both divisions of the third class are again subdivided into two others, for the convenience of instruction. The course in each class occupies a year, except in the first, which is of two years. Pupils who enter in the lowest class, and go regularly through the studies, will thus remain nine years in the gymnasium. The numbers of the several classes in 1837 were, in the first, fifty-four; in the upper second, thirty-two; lower second, forty-seven; upper third division, first, or A, thirty-six; second division, or B, thirty-six; lower third, division first, or A, thirty-eight; division second, or B, thirty-two; fourth class, fifty-five; fifth, fifty-seven; and sixth, fifty. Each division averages, therefore, nearly forty-four pupils, who are at one time under the charge of one teacher. One hundred and eight were admitted during the year, and the same number left the gymnasium; of these, twenty-one received the certificate of maturity to pass to the university, viz. ten who intend to study law, three medicine, five theology, one theology and philosophy, one philosophy, and one political economy, finance, &c., (cameralistic.) Of these all but five were two years in the first class; out of this number two were two years and a half in the first class, and three more had been in the gymnasium less than two years, having entered it in the first class. The average age at leaving the gymnasium was nearly nineteen years, and the greatest and least, respectively, twenty-two and between sixteen and seventeen years. It appears, thus, that on the average, the pupils actually enter at ten, and remain nine years, as required by rule.

The subjects of instruction are Latin, Greek, German, French, religious instruc-

tion, mathematics, (including arithmetic, algebra, and geometry,) natural philosophy and natural history, history, geography, writing, drawing, vocal music, and Hebrew for theologians.

The numbers attached to the names of the different classes, in the following programme, show the number of hours of study per week in the regular branches in which the division of classes takes place. In like manner, the numbers attached to the several subjects of study show how many hours are occupied per week in each of the subjects by the several classes.

SIXTH CLASS, THIRTY HOURS.

Latin. Inflections of nouns, &c. Comparisons. Conjugation of the indicative moods of regular and of some irregular verbs. Translation from Blume's elementary book. Exercises from Blume. Extemporalia. Ten hours.

German. Etymology and syntax. Exercises in writing upon subjects previously narrated. Exercises in orthography, reading, and declaiming. Four hours.

French. Etymology, to include the auxiliary verbs, in Herrmann's grammar. Oral and written exercises. Reading and translation. Exercises on the rules from the grammar. Three hours.

Religion. Bible history of the Old Testament. Committing to memory selected verses. Two hours.

Geography. Delineation of the outlines of Europe, Africa, Asia, and America, from determinate points given. Divisions of the countries, with their principal cities, rivers, and mountains. Two hours.

Arithmetic. The four ground rules, with denominate whole numbers. Their applications. Four hours.

Writing. Elements of round and running hand. Dictation. Writing from copy slips. Three hours.

Drawing. Exercises in drawing lines. Two hours.

FIFTH CLASS, TWENTY-NINE HOURS.

Latin. Etymology. Use of the prepositions. The accusative before an infinitive, practiced orally and in writing, and extempore, and in exercises. Translation from Blume's reader. Ten hours.

German. Parsing, reading, and declamation. Exercises on narrations. Four hours.

French. Etymology, by oral and written exercises. Easier stories from Herrmann's reader. Three hours.

Religion. Explanation of the gospels, according to St. Matthew and St. Luke. Committing to memory the principal facts. Two hours.

Geography. Review of the last year's course. Rivers and mountains of Europe, and chief towns, in connection. Two hours.

Arithmetic. Review of the preceding. Fractions. Four hours.

Writing. Running hand from copy slips. Two hours.

Drawing. Drawing from bodies, terminated by planes and straight lines. Two hours.

FOURTH CLASS, TWENTY-EIGHT HOURS.

Latin. Review of etymology. The principal rules enforced by oral and written exercises and extemporalia. Translation from Jacob's reader and Corn. Nepos. Ten hours.

German. Compositions on subjects previously read. Declamation. Reading from Kalisch's reader. Parsing. Three hours.

French. Review of etymology. Irregular verbs. Reciprocal verbs. Anecdotes and narrations from Herrmann's grammar, and committing the principal to memory. Two hours.

Religion. Gospel, according to St. Matthew, explained. Verses and psalms committed to memory. Two hours.

Geography. Political geography of Germany, and of the rest of Europe. Review of the geography of the other parts of the world. Three hours.

Arithmetic. Review of fractions. Simple and compound proportion. Partnership. Simple interest. Three hours.

Geometry. Knowledge of forms, treated inductively. One hour.

Writing. Running hand, from copy slips. Two hours.

Drawing. From bodies bounded by curved lines. Two hours.

LOWER THIRD CLASS, THIRTY HOURS.

Latin. Syntax. Rules of cases from Zumpt. Exercises and extemporalia. Inflections formerly learned reviewed. Cornelius Nepos. Eight hours.

Greek. Etymology, from Buttman's grammar to regular verbs, included. Translation from Greek into German from Jacob's, from German into Greek from Hens's exercises. Six hours.

German. Compositions in narration and description. Declamation. Two hours.

French. Repetition of inflections, and exercises by extemporalia and in writing. Translation of the fables from Herrmann's reading book, 2d course. Two hours.

Religion. Morals, and Christian faith. Two hours.

Geography. Physical geography. Europe and the other parts of the world. Two hours.

History. General view of ancient and modern history. Two hours.

Mathematics. Legendre's geometry, book 1. Decimals. Algebra. Square and cube root. Four hours.

Drawing. Introduction to landscape drawing. Two hours.

UPPER THIRD CLASS, THIRTY HOURS.

Latin. Division I. Syntax, from Zumpt. Review of the preceding course. Oral exercises in construction of sentences. Written exercises and extemporalia. Caesar Bell. Gall

books 1, 2, and 7, in part. Ovid's *Metamorphoses*, extracts from books 7 and 8. Prosody, rules from Zumpt. Ten hours.

Greek. Division 1. Etymology, from Buttmann's grammar. Oral and written exercises and extemporalia. Jacob's reader. Six hours.

German. Examination of exercises on historical subjects. Poetical selections for declamation. Two hours.

French. Exercises in translation. Written exercises. Extemporalia. Two hours.

Religion. Principal passages from the gospels gone over. General view of the Old Testament writings. Two hours.

History and Geography. Roman history, from the Punic Wars to the destruction of the western empire. History of the middle ages, three hours. Review of the five general divisions of the world, one hour. Four hours.

Mathematics. Geometry. Legendre, books 1 and 2, and part of 3. Algebra, with exercises from Meyer Hirsch. Four hours.

LOWER SECOND CLASS, THIRTY-ONE HOURS.

Latin. Extracts from Livy and Cæsar de Bell. Civ. Review of Bell. Gall., books 2 and 3. Syntax. Exercises and extemporalia. Committing to memory exercises from Livy and Cæsar. Ovid's *Metamorphoses*, books 11 to 14. Eight hours.

Greek. Homer's *Odys.*, 11, 12, 13, and 14. Exercises on the dialects. Xenophon's *Anab.* 1, 2, and part of 3. Excerpts from the grammar reviewed. Exercises and extemporalia. Syntax. Six hours.

Hebrew. Grammar, ending with irregular verbs. Easier parts of historical books of Scripture translated. Vocabulary learned by rote. Exercises on regular and irregular verbs out of the recitation room. Two hours.

German. Correction of written exercises and essays. Exercises on delivery. Two hours.

French. Voltaire's *Charles XII.* Exercises and extemporalia. Two hours.

Religion. Explanation of the principal parts of the Epistles of St. Paul, with historical sketches, and a view of the life of early Christian communities. Two hours.

History. Roman history, from the Punic Wars. History of the middle ages concluded. General view of history. Three hours.

Mathematics. Geometry to proportions and simple figures. Elements of algebra. Logarithms. Four hours.

Natural History. Mineralogy. Botany, especially of native plants. Two hours.

UPPER SECOND CLASS, THIRTY-TWO HOURS.

Latin. Cicero's *Orations*, pro. Rosc. Amer., de Amic., de Senectute. Livy, books 22 to 26, inclusive. Virgil's *Æneid*, books 1 and 2. Some eclogues and excerpts from Georgica. Exercises and extemporalia. Nine hours.

Greek. Homer's *Iliad*, books 4 to 11, inclusive. Arrian *Alex. expedition*, books 1 and 2. Buttmann's grammar, with exercises and extemporalia. Six hours.

Hebrew. Books of Judges and of Ruth, with exercises of syntax. Easy exercises, and committing vocabulary to memory out of the class-room. Two hours.

German. Essays. Delivery. Two hours.

French. Excerpts from Herrmann and Brückner's manual of the more recent French literature. Two hours.

Religion. Christian faith and morals. Two hours.

History. Review of ancient history and geography, using the Latin language. Three hours.

Mathematics. Arithmetical geometry and plane trigonometry. Algebraic exercises. Polygons. Stereometry. Simple and quadratic equations. Four hours.

Physics. General physics. Electricity and magnetism. Two hours.

FIRST CLASS, THIRTY-ONE HOURS.

Latin. Horace's *Odes*, books 3 and 4. Cicero against Verres. Tacitus, *Annals*, books 11 and 12, and extracts from 3 to 6. Cicero, *Tusc. quest.* Extempore translations from German into Latin. Exercises. Declamation. Eight hours.

Greek. Homer's *Iliad*, book 16, *Odyssey*, books 9 to 16, inclusive. Hippas Major, *Charmides*, and Gorgias of Plato, (excerpts.) Sophocles' *Edip. tyr.* and *Antigone*. Grammatical exercises. Buttmann's grammar. Six hours.

Hebrew. Second book of Kings. Genesis. Psalms, 61 to 100. Grammatical criticisms of historical excerpts, or of psalms, as an exercise at home. Two hours.

German. Criticism of compositions. General grammar, and history of the German grammar and literature. One hour.

French. Selections from Scribe and Delavigne. Exercises and extemporalia. Two hours.

Religion. History of the Christian church, to the times of Gregory VII. Two hours.

History. Modern history, and review. Three hours.

Mathematics. Plane trigonometry and application of algebra to geometry. Algebra. Measurement and conic sections. Binomial theorem. Exponential and trigon. functions. Four hours.

Physics. Physical geography. Mechanics. Two hours.

Philosophy. Propædæutics. Logic. One hour.

There are five classes for vocal music, the fifth receiving two hours of instruction in musical notation and singing by ear. The fourth, time and cliffs, &c. Exercises in the natural scale, and harmony. Songs and chorals with one part. The third, two hours, formation of the scale of sharps, running the gamut with difficult intervals, combined with the practical exercises of the last class. The second, two hours, repetition of tones; sharps, and flats. Formation of the scale of flats. Exercises of songs and chorals, in two parts. The first class is an application of what has been learned, as well as a continuation of the science and art, and all the pupils do not, of course, take part in this stage of the instruction. The course is of four hours per week, two for soprano and alto, one for tenor and bass, and one for the union of the four parts. The proficiency is indicated by the fact, that the pupils perform very creditably such compositions as Haydn's "Creation" and Handel's "Messiah."

The extemporalia spoken of in the courses of language, consist of written translations made on the spot by the pupils into a foreign language, of sentences spoken in the vernacular by the teacher. These sentences are, of course, adapted to the progress of the pupil, and are prepared beforehand by the teacher who renders them, especially in the early parts of the course, the application of the rules of grammar on which the pupil is engaged, or of peculiarities of idiom to which his attention is called.

In the classical course, the oral and written exercises are varied in their relative proportions to each other. The translation from Latin or Greek into German, and vice versa, the grammatical exercises, Latin compositions or essays, the extemporalia before explained, the practice in versification, &c., are varied in amount in the different classes, according to the views of the instructor.

One characteristic difference between the classical instruction in the higher classes and in those of similar schools in England and our country, is that, in general, it supposes the grammatical minutiae to have been fully impressed in the lower classes, and discusses philological questions, varieties of reading and collateral subjects of antiquities, history, biography, and geography. The students receive much oral instruction, which they are required to record. The same is the practice to even a greater extent in the other departments of instruction, and the students thus acquire a facility in taking notes which they turn to good account in the university lectures, and which strikes a stranger with surprise on first witnessing it.

Most of the pupils in this class of schools begin their classical course at nine or ten years of age, and yet, judging by the progress shown in the programme of the first class, and by the scholars which the universities of northern Germany turn out, and which are, in fact, formed in the gymnasia, the proficiency is all that can be desired. It is what a youth of nineteen issuing from one of our colleges would be proud of, and clearly proves that the classics are not begun too late.

The mother tongue and French are both taught in these institutions, in combination with the classical studies. These languages are not merely entered upon the programme, but are actually more or less thoroughly taught, according to the time which is allotted and the skill of the teacher. The course of German would seem calculated to make both writers and speakers, and, probably, if the demand for the latter were equal to that of the former, this would prove true in the latter case, as it does in the former.

The religious characteristic of these schools is a striking one, and important in its effects. The Bible is taught rather than a particular creed, though from the fact that the pupils are nearly all of one creed, this forbearance is not essential, and is not always exercised. The separation of religious from other instruction can but have a most injurious tendency, and their connection, as in these schools, on the contrary, a happy influence. Religious knowledge is classed with the sciences in the formal division of the subjects of study.

The courses of physics of the Frederick William gymnasium are exceedingly well calculated to fulfil their object, to give general ideas of natural phenomena, without going into what may be considered technical minutiae; in the latter school physics is connected with an excellent course of physical geography. It seems to me doubtful whether, in the natural history course, more than a general outline of the subject, is necessary, with the prosecution, practically, of such branches as the locality of the institution may render applicable for improving the habits of observation and discrimination. The scientific details of the different branches belong rather to special purposes of study than to general education. The experience of these institutions may, however, be appealed to as proving the entire compatibility of such instruction with an otherwise sound system, and the entire possibility of accomplishing it without neglecting other more important branches.

Drawing and vocal music, which form parts of the regular courses of all these institutions, have not yet found their way into the systems of other nations on the same footing with the regular studies. As a part of physical training, they are important, and as offering a relief from severer pursuits, further recommend themselves in this connection.

The Frederick William Gymnasium is regarded by Dr. Bache, as a fair specimen of this class of schools in Prussia; in the organization and instruction of which a good degree of liberty is tolerated by the government, to enable them the better to meet the peculiar circumstances of each province, and the peculiar views of each director.

The Royal Real School, and City Trade School of Berlin, furnish a course of instruction of the same general value for mental discipline, but better calculated for that class of pupils who are destined in life, not for what are designated as the learned profession, but for tradesmen and mechanics. There is less of verbal knowledge but more of mathematics and their application to the arts; and the whole is so arranged as to facilitate the acquisition of those mental habits which are favorable to the highest practical success.

ROYAL REAL SCHOOL OF BERLIN.

The Royal Real School of Berlin was founded as early as 1747, by Counsellor Hecker. At the period in which this school was founded, Latin and Greek were the exclusive objects of study in the learned schools, and the avowed purpose of this establishment was that "not mere words should be taught to the pupils, but realities, explanations being made to them from nature, from models and plans, and of subjects calculated to be useful in after-life." Hence the school was called a "real school," and preserves this name, indicative of the great educational reform which it was intended to promote, and the success of which has been, though slow, most certain.

The successor of Hecker, in 1769, divided this flourishing school into three departments, the pedagogium, or learned school, the school of arts, and the German school: the whole establishment still retaining the title of real school. The first named department was subsequently separated from the others, constituting the Frederick William gymnasium; the school of arts, and the German, or elementary school, remain combined under the title of the royal real school. The same director, however, still presides over the gymnasium and the real school.

The question has been much agitated, whether the modern languages should be considered in these schools as the substitutes for the ancient in intellectual education, or whether mathematics and its kindred branches should be regarded in this light. Whether the original principle of the "realities" on which the schools were founded, was to be adhered to, or the still older of verbal knowledge, only with a change of languages, to be substituted for it. In this school the languages will be found at present to occupy a large share of attention, while in the similar institution, a description of which follows this, the sciences have the preponderance.

In the royal real school the branches of instruction are—religion, Latin, French, English, German, physics, natural history, chemistry, history, geography, drawing, writing, and vocal music. The Latin is retained as practically useful in some branches of trade, as in pharmacy, as aiding in the nomenclature of natural history, and as preventing a separation in the classes of this school and that of the gymnasium, which would debar the pupils from passing from the former to the latter in the upper classes. It must be admitted that, for all purposes but the last, it occupies an unnecessary degree of attention, especially in the middle classes.

The following table shows the distribution of time among the courses. There are seven classes in numerical order, but ten, in fact, the third, fourth, and fifth being divided into two; the lower fourth is again, on account of its numbers, subdivided into two parallel sections. Of these, the seventh, sixth, and fifth are elementary classes, the pupils entering the seventh at between five and seven years of age. In the annexed table the number of hours of recitation per week of each class in the several subjects is stated, and the vertical column separating the elementary classes from the others, contains the sum of the hours devoted to each branch in the higher classes, excluding the lower section of the fourth class, which has not a distinct course from that of the other division.

TABLE SHOWING THE NUMBER OF HOURS OF RECITATION PER WEEK, OF EACH CLASS, IN THE SUBJECTS TAUGHT IN THE ROYAL REAL SCHOOL OF BERLIN.

SUBJECTS OF STUDY.	Sum of the hours in the seven upper classes.						Proportion of other studies to German in the			
	First Class.	Second Class.	Third Class, A.	Third Class, B.	Fourth Class, A.	Fourth Class, B. I. } Fourth Class, B. II. }	Royal Real School.	First six classes of the Frederick William. Gymn.	In all the classes of the Frederick William. Gymn.	
Latin,	4	4	4	5	6	5 6	1.4	2.9	3	
French,	4	4	4	3	3	4 4	1.1	0.7	0.9	
English,	2	2	2				0.3			
German,	3	3	3	4	3	4 4	1.0	0.8	1.0	
Religion,	2	2	2	2	2	2 2	0.6	0.6	0.8	
Mathematics,*	6	6	5	5	6	6 4	1.7	1.1	1.6	
Natural History, . .	3	2	2	2			0.4	0.1†	0.1	
Physics,	2	2	2	2	2	2 2	0.4	0.2†	0.2	
Chemistry,	2	2	2	2	2	2 2	0.4			
Geography,	3	3	3	2	2	2 3	0.4	0.5	0.5	
History,	3	3	3	2	2	2 2	0.7	0.3	0.7	
Drawing,	2	2	2	2	2	2 2	0.6	0.4	0.4	
Writing,	2	2	2	2	2	2 2	0.2	0.3	0.3	
Singing,	2	4	3	2	2	2 2	0.7	0.6	0.6	
Total,	36	36	35	35	32	32	26	26	26	26

Pupils who enter this school between five and seven years of age, and go regularly through the elementary classes, are prepared at ten to pass to its higher classes, or to enter the lowest of the gymnasium. It is thus after the fifth class that a comparison of the two institutions must begin. The studies of the real school proper, and of the gymnasium, have exactly the same elementary basis, and they remain so far parallel to each other that a pupil, by taking extra instruction in Greek, may pass from the lower third class of the former to the lower third of the latter. This fact alone is sufficient to show that the real schools must be institutions for secondary instruction, since the pupils have yet three classes to pass through after reaching the point just referred to. It serves also to separate the real schools from the higher burgher schools, since the extreme limit of the courses of the latter, with the same assistance in regard to Greek, only enables the pupil to reach the lower third class of the gymnasium. In general, a pupil would terminate his studies in the real school at between sixteen and eighteen years of age. The difference between the subjects of instruction in the real school and the Frederick William gymnasium, consists in the omission in the former of Greek, Hebrew, and philosophy, and the introduction of English and chemistry. The relative proportions of time occupied in the same subjects in the two schools, will be seen by comparing the two columns next on the right of the numbers for the seventh class, in the table just given. The first of these columns contains the proportion of the number of hours per week devoted to the different subjects in the six classes of the real school above the elementary, the number of hours devoted to the German being taken as unity; and the second, the same proportion for six classes of the gymnasium, beginning with the lowest, the same number of hours being taken as the unit, as in the preceding column. To bring the natural history and physics into comparison, I have taken the numbers for the

* Including arithmetic, geometry, algebra, and trigonometry.

† These numbers include the entire course.

upper classes of the gymnasium in which these branches are taught. Of the courses common to the two schools, those to which nearly equal attention is paid in both institutions, are—the religious instruction, the German, geography and history, writing, and vocal music. The French, mathematics, physics, and natural history, predominate in the real school, the Latin in the gymnasium. The effect of reckoning the first, second, and upper third classes of the gymnasium, does not materially change the proportionate numbers of the courses which are common to the two schools, except as to Latin and mathematics. To show this, the column on the extreme right of the table is introduced, containing the proportions for all the nine classes of the Frederick William gymnasium.

There were, in 1838, five hundred and ten pupils in this real school, under the charge of fourteen regular or class masters, teaching several subjects in the lower classes, and of six other teachers. Each of the eleven class divisions thus averages about forty-six, who are under the charge of one teacher at a time.

The elementary course in the real school is similar to that described in the burgher schools, beginning with the phonic method of reading, the explanations of all the words and sentences being required at the same time that the mechanical part of reading is learned. Written and mental arithmetic are taught together in the lowest class. The religious instruction consists of Bible stories adapted to their age; and verses are committed to improve the memory of words. The exercises of induction are practiced, but in a way not equal to that with objects, introduced by Dr. Mayo in England. Some of the pupils are able to enter the gymnasium after going through the two lowest classes.

In regard to the real classes proper, as I propose to enter into the particulars of the course of study of the trade school, I shall here merely make a few remarks upon two of the branches studied in them, namely, French and drawing. The remarks in regard to the French will serve to show how great a latitude a teacher is allowed in the arrangement of his methods, the result of which is, that those who have talent are interested in improving their art by observation and experiment. The French teacher to whom I allude had been able to secure the speaking, as well as the reading, of French from his pupils. From the very beginning of the course this had been a point attended to, and translation from French into German had been accompanied by that from German into French: the conversation on the business of the class-room was in French. The pupils were exercised especially in the idioms of the language in short extempore sentences, and the differences of structure of the French and their own language were often brought before them, and the difficulties resulting from them anticipated. Difficult words and sentences were noted by the pupils. Declamation was practiced to encourage a habit of distinct and deliberate speaking, and to secure a correct pronunciation. The chief burthen of the instruction was oral. Without the stimulus of change of places, the classes under this gentleman's instruction were entirely alive to the instruction, and apparently earnestly engaged in the performance of a duty which interested them. If such methods should fail in communicating a greater amount of knowledge than less lively ones, which I believe can not be the case, they will serve, at least, to break down habits of intellectual sloth to promote mental activity, the great aim of intellectual education.

The drawing department of this school is superintended by a teacher who has introduced a new method of instruction, particularly adapted to the purpose for which drawing is to be applied in common life and in the arts; a method which is found to enable a much larger proportion of the pupils to make adequate progress than the ordinary one of copying from drawings.* In this method the pupil begins by drawing from simple geometrical forms, those selected being obtained from models in wood or plaster, of a square pillar,† a niche, and a low cylinder, (the form of a mill-stone.) The square pillar separates in joints, affording a cube and parallelepipeds of different heights. The hemisphere which caps the niche may be removed, leaving the concave surface of its cylindrical part. The exercises of the pupil ran thus: First, to place upon a board, or upon his paper or

* Mr. Peter Schmidt, who now, in his old age, has received from the government a pension in return for the introduction of his method, and the instruction in it of a certain number of teachers.

† Seven and a half inches high, and one inch and a half in its square section.

slate, a point vertically above another, or so that the lines joining the two shall be parallel to the right or left hand edge of the board, paper, or slate. Second, to join them. Third, to place a point horizontally from the second, and at a distance equal to that between the first and second points. Fourth, to place one vertically over the third, and at a distance equal to that below the first, and to join the third and fourth. The first and fourth being then joined, a square is formed. After practice in this, the simple elevation of the cube is drawn. Next, a perspective, by the use of a small frame and silk threads, such as is common in teaching the elements of this subject, and by means of which the pupil acquires readily a knowledge of the practice. The drawing of lines in various positions, and with various proportions, terminates this division of the subject. The niche and cylinder afford a similarly graduated series of lessons on the drawing of curved lines, and the drawing of lines of different degrees of strength and of shadows is introduced. This is accompanied with some of the more simple rules of shadow and shade. More difficult exercises of perspective follow from natural objects and from works of art or mechanism, according to the direction to the pupil's attainments and the amount of taste which he displays. This method of teaching has been introduced quite generally in Prussia, and with the best results as to the formation of accuracy of eye and of hand.

CITY TRADE SCHOOL.

The City Trade School was founded to give a more appropriate education for the mechanic arts and higher trades than can be had through the courses of classical schools. It is a great point gained, when the principal is admitted that different kinds of education are suited to different objects in life; and such an admission belongs to an advanced stage of education. As a consequence of a general sentiment of this kind, numerous schools for the appropriate instruction of those not intended for the learned professions grow up by the side of the others.

The city of Berlin is the patron of the trade school which I am about to notice, as the king is of the real school already spoken of. Its stability is thus secured, but the means of furnishing it with the necessary materials for instruction are liberally provided.* The trade school is a day school, and consists of five classes, of which the lowest is on the same grade as to age and qualification at admission, as the fourth class of a gymnasium. It is assumed that at twelve years of age it will have been decided whether a youth is to enter one of the learned professions, or to follow a mechanical employment, or to engage in trade, but the higher classes are not closed against pupils. Of the five classes, four are considered necessary for certain pursuits and the whole five for others; the courses of all but the first class last one year, that of the first, two years, a youth leaving the school at from 16 to 17 or 18 years of age, according to circumstances. During the year 1836-7, the number of pupils in the several classes were, in the first class, eleven; in the second, twenty-nine; in the upper third, forty-three; in the lower third, fifty-two; in the fourth, fifty; total, one hundred and eighty-five; from which numbers it appears that a considerable proportion of the pupils leave the school without entering the first class. The number of teachers is nineteen, five being regular or class teachers, and fourteen assistants. The director gives instruction.

The following list of the callings to which pupils from this school have gone on leaving it, will show that it is really what it professes to be, a school for the instruction of those who intend to follow occupations connected with "commerce, the useful arts, higher trades, building, mining, forestry, agriculture, and military life;" and further, that its advantages are appreciated by the class for whom it is intended. The list includes the pupils who have left the school from the first and second classes, in the years 1830, 1832, 1833 and 1837. From the first class, two teachers, five architects, one chemist, twenty-six merchants, one machinist, two calico-printers, two glass-workers, one cloth manufacturer, one silk manufacturer, one miner, thirteen agriculturalists, eight apothecaries, two gardeners, one painter, one mason, one carpenter, one tanner, one miller, one baker, one potter, one saddler, one soap-boiler, one cabinet-maker, two soldiers, one musician, five to

* The present director of this school, Mr. Kloden, was formerly director of the higher burgher school at Potsdam, and is one of the most distinguished teachers in his line in Prussia.

public offices, one to the trade institution, six to gymnasium. From the second class, forty-one merchants, one teacher, one chemist, one machinist, one ship-carpenter, nine agriculturist, one sugar-refiner, three dyers, one tanner, one brewer, two distillers, one miner, two lithographers, one dye-sinker, three apothecaries, one dentist, two painters, two gardeners, three masons, five carpenters, one miller, four bakers, one butcher, one to the trade institution, three to public offices, two to a gymnasium, one musician, one veterinary surgeon, one soldier, being ninety from the first class, and ninety-seven from the second, in the period of four years.

In the course of instruction, the sciences and kindred branches are made the basis, and the modern languages are employed as auxiliaries, the ancient languages being entirely omitted. The subjects embraced in it are—religious instruction, German, French, English, geography, history, mathematics, physics, chemistry, technology, natural history, writing, drawing, and vocal music.

The courses are fully laid down in the following list, beginning with the studies of the lowest or fourth class.

FOURTH CLASS.

*Religious Instruction.** The gospel according to St. Luke, and the Acts of the Apostles explained, with a catechetical development of the truths of religion and ethical applications. Two hours per week.

German. Grammatical exercises in writing. Recital of poetical pieces.

French. Grammatical exercises. Regular and irregular verbs. Reading from Lauren's Reader. One hour of conversation. Four hours.

Arithmetic. Mental and written, including proportions and fractions, with the theory of the operations. Four hours.

Geometry. Introductory course of forms. Two hours.

Geography. Elementary, mathematical, and physical geography. Two hours.

Natural History. In the summer term, elements of botany, with excursions. In the winter, the external characters of animals. Two hours.

Physics. Introductory instruction. General properties of bodies. Forms of crystals, specific gravity, &c. Two hours.

Writing. Two hours.

Drawing. Outline drawing and shadows, from models and copy-boards. Two hours.

Vocal Music. Two hours.

LOWER THIRD CLASS.

Religious Instruction. The Acts of the Apostles and the Epistles read and explained. Two hours.

German. Grammar with special reference to orthography and etymology. Written exercises upon narrations made by the teacher. Delivery of poetical pieces. Four hours.

French. Translation from Gredicke's Chrestomathy, oral and in writing. Written translations from Beauvais' Introduction, from German into French. Grammar, examples treated extempore. Four hours.

Arithmetic. Partly abstract, partly practical, from Diesterweg's Instructor. Four hours.

Geometry. Determination of angles in triangles and polygons. Equality of triangles. Dependence of angles and sides of triangles. Constructions. Three hours.

Geography. Physical description of the parts of the earth, except Europe. Two hours.

Natural History. Mineralogy. In summer, botany, the class making excursions for practical exercise. Man. Three hours.

Physics. General properties of bodies and solids in particular. Doctrines of heat and their application to natural phenomena and the arts. Two hours.

Chemistry. Introduction. Atmospheric air. Experimental illustrations of chemistry, applied to the arts. Two hours.

Writing. Two hours. *Architectural and topographical drawing.* Two hours. *Drawing* by hand for those who do not take part in the other. Two hours.

Vocal Music. Two hours.

UPPER THIRD CLASS.

Religious Instruction. Christian morals, from Luther's Catechism. Two hours.

German. Simple and complex sentences. Compositions on special subjects. Poems explained and committed. Four hours.

French. Translation from Gredicke's Chrestomathy, oral and in writing. Written translations from Beauvais' Introduction, from German into French. Grammar, examples treated extempore. Four hours.

Arithmetic. Properties of numbers. Powers. Roots. Decimal fractions. Practical Arithmetic from Diesterweg. Four hours.

Geometry. Similar figures. Geometrical proportion. Exercises. Mensuration of rectilinear figures. Three hours.

Geography. Physical geography of Europe, and in particular of Germany and Prussia. Two hours.

Natural History. Continuation of the mineralogy of the lower third class. Review in outline of zoology and the natural history of man in particular. Botany, with excursions in summer. Three hours.

* Roman Catholic pupils are not required to take part in this instruction, which is communicated by a Protestant clergyman.

Physics. Electricity and magnetism, with experiments. Two hours.
Chemistry. Water and non-metallic bodies, with experiments. Two hours.
Writing. Two hours. *Architectural and topographical drawing.* Two hours. Some of the pupils during this time are engaged in ornamental drawing.
Vocal Music. Two hours.

SECOND CLASS.

Religious Instruction. Explanation of the first three gospels. History of the Christian religion and church to the reformation. Two hours.
German. Correction of exercises written at home, upon subjects assigned by the teacher. Oral and written exercises. Introduction to the history of German poetry. Three hours.
French. Grammar; extemporalia for the application of the rules. Written and oral translations from German into French, from Beauvais' Manual, and vice versa, from Ideler and Nolte's Manual. Four hours.
English. Exercises in reading and speaking. Translation into German, from Burkhart. Dictation. Verbs. Two hours.
Arithmetic. Commercial Arithmetic. Algebra, to include simple and quadratic equations. Logarithms. Three hours.
Geometry. Circles. Analytical and plane trigonometry. Three hours.
Geography. The states of Europe, with special reference to their population, manufactures and commerce. Two hours.
History. Principal events of the history of the middle ages and of later times, as an introduction to recent history. One hour.
Natural History. Mineralogy. Physiology of plants. Three hours.
Chemistry. Metallic bodies and their compounds, with experiments. Three hours.
Architectural, topographical, and plain drawing. Drawing with instruments. Introduction to India ink drawing. Beginning of the science of constructions. Two hours.
Drawing. From copies, and from plaster and other models. Two hours. This kind of drawing may be learned instead of the above.
Vocal Music. Two hours.

FIRST CLASS.

Religious Instruction. History of the Christian religion and church continued. References to the bible. One hour.
German. History of German literature to recent times. Essays. Exercises of delivery. Three hours.
French. Reading from the manual of Buchner and Hermann, with abstracts. Classic authors read. Review of Grammar. Exercises at home, and extemporalia. Free delivery. Correction of exercises. Four hours.
English. Syntax, with written and extempore exercises from Burkhart. Reading of classic authors. Writing of letters. Exercises in speaking.
Arithmetic. Algebra. Simple and quadratic equations. Binomial and polynomial theorems. Higher equations. Commercial arithmetic continued. Three hours.
Geometry. Plane trigonometry and its applications. Conic sections. Descriptive Geometry. Three hours.
History. History of the middle ages. Modern history, with special reference to the progress of civilization, of inventions, discoveries, and of commerce and industry. Three hours.
Natural History. In summer, botany, the principal families, according to the natural system. In winter, zoology. The pupils are taken, for the purpose of examining specimens to the Royal Museum.
Physics. In summer, optics with experiments. In winter the system of the world. Three hours.
Technology. Chemical and mechanical arts and trades, described and illustrated by models. Excursions to visit the principal workshops. Four hours.
Architectural and machine drawing. Two hours. Those pupils who do not take part in this, receive lessons in ornamental drawing from plaster models.
Vocal Music. Two hours.
 The pupils of this class are, besides, engaged in manipulating in the laboratory of the institution several hours each week.

The courses require a good collection of apparatus and specimens to carry them out, and this school is, in fact, better furnished than any other of its grade which I saw in Prussia, besides which, its collections are on the increase. The facilities for the courses are furnished by a collection of mathematical and physical apparatus, a laboratory, with a tolerably complete chemical apparatus and series of tests, a collection of specimens of the arts and manufactures (or technological collection,) a collection of dried plants, and of engravings for the botanical course, and a small garden for the same use, a collection of minerals, a collection of insects, a collection in comparative anatomy, a series of engravings for the drawing course, and of plaster models, a set of maps, and other apparatus for geography, some astronomical instruments, and a library. The pupils are taken from time to time, to the admirable museum attached to the university of Berlin, for the examination of zoological specimens especially.

That this school is as a preparation for the higher occupations, and for professions not ranking among the learned, the equivalent of the gymnasium is clearly shown by the subjects and scope of its courses, and by the age of its pupils.

Some of these occupations require no higher instruction, others that the pupils shall pass to the special schools introductory to them. So also, many of the pupils of the gymnasia pass at once into active life, others enter the university.

The class of schools to which the two last described belong, are most important in their influence. In many countries, an elementary education is the limit beyond which those intending to enter the lower grades of the occupations enumerated in connection with the City Trade School of Berlin, do not pass; and if they are inclined to have a better education, or if intending to embrace a higher occupation, they desire to be better instructed, they must seek instruction in the classical schools. The training of these schools is, however, essentially different from that required by the tradesman and mechanic, the verbal character of the instruction is not calculated to produce the habits of mind in which he should be brought up, and the knowledge which is made the basis of mental training is not that which he has chiefly occasion to use. Besides, were the course ever so well adapted to his object, the time at which he must leave school only permits him to follow a part of it, and he is exposed to the serious evils which must flow from being, as it were, but half taught.

In fact, however, he requires a very different school, one in which the subjects of instruction are adapted to his destination, while they give him an adequate intellectual culture; where the character of the instruction will train him to the habits which must, in a very considerable degree, determine his future usefulness; and where the course which he pursues will be thorough, as far as it goes, and will have reached before he leaves the school the standard at which it aims. Such establishments are furnished by the real schools of Germany, and as the wants which gave rise to them there, are strongly felt every where, this class of institutions must spread extensively. In Germany they are, as has been seen, no new experiment, but have stood the test of experience, and with various modifications to adapt them to differences of circumstances or of views in education, they are spreading in that country. As they become more diffused, and have employed a greater number of minds in their organization, their plans will no doubt be more fully developed.

It is certainly highly creditable to Germany that its "gymnasias," on the one hand, and its "real schools" on the other, offer such excellent models of secondary instruction in its two departments. The toleration which allows these dissimilar establishments to grow up side by side, admitting that each, though good for its object, is not a substitute for the other, belongs to an enlightened state of sentiment in regard to education, and is worthy of the highest commendation.

DISTRIBUTION OF STUDIES IN THE CITY TRADE SCHOOL OF BERLIN.

SUBJECTS OF INSTRUCTION.	NO. OF HOURS PER WEEK.					Total.
	First Class.	Second Class.	Upper Third Class.	Lower Third Class.	Fourth Class.	
Religion,	1	2	2	2	2	9
German,	3	3	4	4	4	18
French,	4	4	4	4	4	20
English,	2	2				4
Arithmetic,	3	3	4	4	4	18
Geometry,	3	3	3	3	2	14
Geography,		2	2	2	2	8
History,	3	1				4
Natural History,	2	3	3	3	2	13
Physics,	3		2	2	2	9
Chemistry,		3	2	2		7
Technology,	4					4
Writing,			2	2	2	6
Drawing,	4	4	2	2	2	14
Vocal Music,	2	2	2	2	2	10
Total,	34	32	32	32	28	

In Prussia, every trade in which a want of skill may jeopard human life, is regulated by law; and before its exercise can be commenced, a license is required, to obtain which an examination must be passed. This requisition of the law is considered to involve a reciprocal obligation on the part of the government to afford the opportunity of obtaining the necessary knowledge, and schools have accordingly been established for the purpose. Twenty of the regencies of the kingdom already have technical schools established in them, where instruction is, in general, given at the expense of the state, or province, or for a very trifling remuneration; and it is the intention that each regency shall have at least one such school within its limits. When there is a burgher school in the place intended as the locality for one of these technical schools, the two schools are connected as already described: at Potsdam, the special technical course alone being given in a separate department. In all cases the government supplies the apparatus for the courses of mechanics, physics, and chemistry; furnishes the requisite engravings for the courses of drawing; and supplies works for the library and for instruction.

The most promising pupils from the provincial schools usually find places at the central Institute at Berlin, which is in fact the university of arts. There is a special school for ship-builders at Stettin, in Pomerania.

INSTITUTE OF ARTS OF BERLIN.

This institution is intended to impart the theoretical knowledge essential to improvement in the arts, and such practical knowledge as can be acquired to advantage in a school. It is supported by the government, and has also a legacy, to be expended in bursaries at the school, from Baron Von Seydlitz. The institution is under the charge of a director,* who has the entire control of the funds, of the admissions and dismissals, and the superintendence of the instruction. The professors and pupils do not reside in the establishment, so that the superintendence is confined to study hours. There are assistant professors, who prepare the lectures, and conduct a part of the exercises, in some cases reviewing the lessons of the professors with the pupils. Besides these officers there are others, who have charge of the admirable collections of the institution, and of the workshops, offices, &c. The number of professors is eight, and of repeaters, two. The discipline is of the most simple character, for no pupil is allowed to remain in connection with the institution unless his conduct and progress are satisfactory. There is but one punishment recognized, namely, dismissal; and even a want of punctuality is visited thus severely.

In the spring of every year the regencies advertise that applications will be received for admission into the institute, and the testimonials of the candidates who present the best claims are forwarded to the director at Berlin, who decides finally upon the several nominations. The pupils from the provincial schools have, in general, the preference over other applicants. At the same time notice is given by the president of the Society for the Promotion of National Industry, in relation to the bursaries vacant upon the Seydlitz foundation. The qualifications essential to admission are—to read and write the German language with correctness and facility, and to be thoroughly acquainted with arithmetic in all its branches. The candidate must, besides, be at least seventeen years of age. Certain of the

* The director, M. Beuth, is also president of the Royal Technical Commission of Prussia, and has the distribution of the funds for the encouragement of industry, amounting to about seventy-five thousand dollars annually. M. Beuth is also a privy counsellor, and is president of the Society for the Encouragement of National Industry in Prussia.

pupils, as will be hereafter more fully stated, require to have served an apprenticeship to a trade. The Seydlitz bursar must, in addition, show—1st. That their parents were not artisans,* relatives of the founder having the preference over other applicants. 2d. That they have been apprenticed to a trade, if they intend to follow one not taught in the institution. 3d. They must enter into an engagement that if they leave the mechanical career they will pay back the amount of their bursaries. There are sixty or seventy gratuitous pupils in the school of whom eighteen are upon the Seydlitz foundation. Forty are admitted annually, this number having been adopted because it is found that, in the course of the first month, about a fourth of the newly admitted pupils fall away from the institution. Each bursar receives two hundred and twenty-five dollars per annum for maintenance. The education is gratuitous. The regular pupils enter on the first of October, but the director is authorized to admit, at his pleasure, applicants who do not desire to become bursars, but who support themselves, receiving gratuitously, however, the instruction afforded by the institution.

The education of the pupils is either solely theoretical, or combines theory and practice, according to the calling which they intend to follow. The first division is composed of students, who receive theoretical instruction only, and who are preparing to become masons, carpenters, and joiners. They are supposed to have become acquainted with the practice of their trade before entering the institution, being required to have served, previously, a part of their apprenticeship. An excellent reason is assigned for this rule, namely, that on leaving the school such pupils are too old to begin their apprenticeship to these callings, and would, if they attempted to do so, find the first beginnings so irksome as to induce them to seek other employments, and thus their special education would be lost, and the object of the school defeated. The second division embraces both theoretical and practical instruction, and consists of three classes. First, the stone-cutters, engravers, lapidaries, glass-cutters, carvers in wood and ivory, and brass-founders. Second, dyers and manufacturers of chemical products. Third, machine-makers and mechanicians. The practical instruction is different for each of these three classes.

The general course of studies last two years, and the pupils are divided into two corresponding classes. The first class is, besides, subdivided into two sections. The lower or second class is taught first; mechanical drawing, subdivided into decorative drawing, including designs for architectural ornaments, utensils, vases, patterns for weaving, &c., and linear drawing, applied to civil works, to handicrafts, and to machines. Second, modelling in clay, plaster, and wax. Third, practical arithmetic. Fourth, geometry. Fifth, natural philosophy. Sixth, chemistry. Seventh, technology, or a knowledge of the materials, processes, and products of the arts. The studies of the lower section of the first class are general, while those of the first section turn more particularly upon the applications of science to the arts. In the lower section, the drawing, modelling, natural philosophy, and chemistry, of the first year, are continued; and, in addition, descriptive geometry, trigonometry, stereometry, mixed mathematics, mineralogy, and the art of construction are studied. In the upper or first section, perspective, stone-cutting, carpentry, and mechanics applied to the arts, are taught, and the making of plans and estimates for buildings, workshops, manufactories, machines, &c. These are common to all pupils, whatever may be their future destination; but beside them, the machinists study, during the latter part of their stay at the institution, a continuation of the course of mechanics and mathematical analysis. The examples accompanying the instruction in regard to plans and estimates are adapted to the intended pursuits of the pupils.

The courses of practice are begun by the pupils already enumerated as taking part in them, at different periods of their stay in the institution. The future chemists and mechanics must have completed the whole range of studies above mentioned, as common to all the pupils, while the others begin their practice after having completed the first year's course. There are workshops for each class of pupils, where they are taught the practice of their proposed calling, under competent workmen. There are two foundries for bronze castings, one for small, the

* The object of M. Von Seydlitz appears to have been to counteract, to the extent of his power, the tendency to the increase of the learned professions, at the expense of the mechanic arts, by an inducement to a course exactly contrary to the usual one.

other for large castings, and the work turned out of both bears a high character. A specimen of this work is retained by the institution in a beautiful fountain, which ornaments one of the courts of the building. The models for castings are made in the establishment. In the first division of pupils, in reference to their callings, there are usually some whose art is connected with the fine arts in some of its branches, and these have an opportunity during part of the week to attend the courses of the Berlin Academy. The future chemists work for half the year in the laboratory. They are chiefly employed in chemical analysis, being furnished with the requisite materials for practice by the institution. In the shops for the instruction of mechanics are machines for working in wood and the metals, a steam-engine of four horses' power, a forge, tools in great variety, lathes, &c. The pupils have the use of all necessary implements, according to their progress, and are gradually taught, as if serving a regular apprenticeship. When capable, they are enabled to construct machines which may be useful to them subsequently, as a lathe, or machine for cutting screws, or the teeth of wheels, &c., and are furnished with all the materials for the purpose, the machine becoming their own property. In these workshops, also, the models for the cabinet of the school are made. This is by far the most complete establishment for practice which I met with in any institution, and I believe the practice is both real and effectual. It involves, however, an expenditure which in other cases it has not been practicable to command. The scale of the whole institution is, in the particular of expenditure, most generous.

This is one specimen of the various plans which have been devised to give practical knowledge of an art in connection with theory in a school. It is first most judiciously laid down that certain trades can not be taught to advantage in a similar connection, but that the practical knowledge must be acquired by an apprenticeship antecedent to the theoretical studies. There are besides, however, a large number of trades, the practice of which is to be taught in the institution, and requiring a very considerable expenditure to carry out the design properly. This could not be attempted in a school less munificently endowed, and requires very strict regulations to carry it through even here. The habits of a school workshop are, in general, not those of a real manufactory, where the same articles are made to be sold as a source of profit; hence, though the practical knowledge may be acquired, the habits of work are not, and the mechanic may be well taught but not well trained. At the private school of Charonne, workshops were established, giving a variety of occupation to the pupils; but the disposition to play rather than to work, rendered these establishments too costly to be supported by a private institution, and the plan adopted instead of this, was to make the pupils enter a regular workshop for a stated number of hours, to work for the proprietor or lessee. This plan remedies one evil, but introduces another, that as the machinist takes orders, with a view to profit, the work may have so little variety as only to benefit a small class of the pupils. The pupils at Charonne are, however, under different circumstances from those at Berlin; they are generally younger, and, being independent of the school, where they pay for their education, are not under the same restraint as in the other institution; hence the experience of the one school does not apply in full force to the other. At Dresden, in a school somewhat similar to that of Berlin, a different mode from either of those just mentioned has been adopted. An arrangement is made with a number of mechanics, of different occupations, to receive pupils from the schools as apprentices, allowing them the privilege of attending, during certain specified hours of the day, upon the theoretical exercises of the institution. Where such an arrangement can be made, the results are unexceptionable, and the advantages likely to accrue to the mechanic arts, from the union of theory with practice, will offer a strong inducement to liberally disposed mechanics to take apprentices upon these terms. Small workshops, connected with an institution, must necessarily offer inferior advantages, even if closely regulated, so as to procure the greatest possible amount of work from the pupils; this should not be done for the sake of the profit, but to give him genuinely good habits.

The difficulties in giving practical instruction in the chemical arts are not to be compared with those under discussion, and will be found to have been satisfactorily obviated in several schools. This subject will receive its more appropriate discussion in connection with the polytechnic institution of Vienna, where the chemical

department, at least as far as manufacturing chemistry is concerned, is generally recognized as having produced the best results of any yet established.

Returning to the subject of the theoretical instruction in the Berlin institute of arts, the following statement will serve to show the succession of the course, with the time devoted to each :

WINTER COURSE.

MONDAY.

First Class. First division—drawing and sketching machines, eight A. M. to twelve o'clock. Discussion of machines, estimates of power, &c., two P. M. to five P. M. Second division—machine drawing, eight to ten. Modelling in clay, ten to twelve. Physics, two to five.

Second Class. Machine drawing, eight to ten. Modelling, ten to twelve. Elements of geometry, two to four. Repetition of the lecture, four to five.

TUESDAY.

First Class. First division—architectural plans and estimates, eight to twelve. Practical instruction in machinery, two to five. Second division—ornamental and architectural drawing, eight to twelve. Trigonometry, two to five.

Second Class. Ornamental and architectural drawing, eight to twelve. Physics, two to four. Repetition of the lecture, four to five.

WEDNESDAY.

First Class. First division—original designs, eight to twelve. Discussion of machinery. Second division—mineralogy, eight to nine. Machine drawing, nine to twelve. Trigonometry, two to five.

Second Class. Machine drawing, eight to twelve. Practical arithmetic, two to five.

THURSDAY.

First Class. First division—drawing and sketching machines, eight to twelve. Architectural instruction, estimates, two to five. Second division—decorative and architectural drawing, eight to ten. Modelling in clay, ten to twelve. Trigonometry, two to five.

Second Class. Decorative and architectural drawing, eight to ten. Modelling in clay, ten to twelve. Physics, two to four. Repetition of the lecture, four to five.

FRIDAY.

First Class. First division—architectural plans, eight to twelve. Practical instruction in machinery, two to five. Second division—machine drawing, eight to twelve. Physics, two to five.

Second Class. Machine drawing, eight to twelve. Elementary mathematics, two to four. Repetition of the lessons, four to five.

SATURDAY.

First Class. First division—perspective and stone-cutting, eight to twelve. Original designs, two to five. Second division—mineralogy, eight to nine. Decorative and architectural drawing, nine to twelve. Trigonometry, two to five.

Second Class. Decorative and architectural drawing, eight to twelve. Practical arithmetic, two to five.

The summer term, which follows this, embraces the practical instruction.

SUMMER TERM.

MONDAY.

First Class. First division—in the workshops from seven A. M. to twelve, and from one until seven P. M. Second division—machine drawing, eight to twelve. Applied mathematics, two to five.

Second Class. Machine drawing, eight to ten. Modelling, ten to twelve. Chemistry, two to four. Repetition, four to five.

TUESDAY.

First Class. First division—analytical dynamics, eight to nine. Drawing of machines from original designs, nine to twelve. Machinery, two to five. Second division—decorative and architectural drawing, eight to twelve. Chemistry, two to five.

Second Class. Decorative and architectural drawing, eight to twelve. Elementary mathematics, two to four. Repetition, four to five.

WEDNESDAY.

First Class. First division—in the workshops from seven to twelve, and from one to seven. Second division—machine drawing, eight to ten. Modelling, ten to twelve. Applied mathematics, two to five.

Second Class. Machine drawing, eight to twelve. Practical arithmetic, two to four. Materials used in the arts, four to five.

THURSDAY.

First Class. First division—in the workshops from seven to twelve, and from one to seven. Second division—machine drawing, eight to ten. Modelling, ten to twelve. Applied mathematics, two to five.

Second Class. Decorative and architectural drawing, eight to ten. Modelling, ten to twelve. Chemistry, two to four. Repetition of the lesson, four to five.

FRIDAY.

First Class. First division—analytical dynamics, eight to nine. Drawing of a machine for an original design, nine to twelve. Machinery, two to five. Second division—chemistry, eight to nine. Applied mathematics, nine to twelve. Chemistry, two to five.

Second Class. Machine drawing, eight to twelve. Elementary mathematics, two to four. Repetition of the lesson, four to five.

SATURDAY.

First Class. First division—in the workshops, from seven to twelve, and from one to seven. Second division—decorative and architectural drawing, eight to twelve. Applied mathematics, two to five.

Second Class. Decorative and architectural drawing, eight to twelve. Practical arithmetic, two to four. Materials used in the arts, four to five.

The chemical division of the practical classes is engaged every day in the laboratory. On Tuesday and Wednesday, the library is open for reading from five to eight, P. M.

The collections for carrying out the various branches of instruction are upon the same liberal scale with the other parts of the institution. There is a library of works on architecture, mechanics, technology, the various arts, archeology, &c., in German, French and English. This library is open twice a week, from five to eight in the evening, to the pupils of the first class of the school, and to such mechanics as apply for the use of it.

There is a rich collection of drawings of new and useful machines, and of illustrations of the different courses, belonging to the institution. Among them is a splendid work, published under the direction of Mr. Beuth, entitled *Models for Manufactures and Artisans*, (*Vorlegeblätter für Fabricanten und Handwerker*), containing engravings by the best artists of Germany, and some even from France and England, applicable to the different arts and to architecture and engineering. Among the drawings are many from original designs by Shenckel, of Berlin. There is a second useful but more ordinary series of engravings, on similar subjects, also executed for the use of the school. These works are distributed to the provincial trade schools, and presented to such of the mechanics of Prussia as have especially distinguished themselves in their vocations. The collection of models of machinery belonging to the school probably ranks next in extent and value to that at the Conservatory of Arts of Paris. It contains models of such machines as are not readily comprehended by drawings. Most of them are working models, and many were made in the workshops of the school. They are constructed, as far as possible, to a uniform scale, and the parts of the models are of the same materials as in the actual machine. There is an extensive collection of casts, consisting of copies of statues, basso-relievos, utensils, bronzes, and vases of the museums of Naples, Rome, and Florence, and of the British Museum, and of the models of architectural monuments of Greece, Rome, Pompeii, &c., and copies of models, cameos, and similar objects; those specimens only have been selected which are not in the collection of the Academy of Fine Arts of Berlin, to which the pupils of the Institute of Arts have access. There are good collections of physical and chemical apparatus, of minerals, of geological and technological specimens.

The instruction is afforded in part by the lectures of the professors, aided by text-books specially intended for the school, and in part by the interrogations of the professors and of the assistants and repeaters. At the close of the first year there is an examination to determine which of the pupils shall be permitted to go forward, and at the close of the second year to determine which shall receive the certificate of the institute. Although the pupils who come from the provinces are admitted to the first class of the institute, upon their presenting a testimonial that they have gone through the course of the provincial schools satisfactorily, it frequently happens that they are obliged to retire to the second, especially from defective knowledge of chemistry.

The cost of this school to the government is about twelve thousand dollars annually, exclusive of the amount expended upon the practical courses and upon the collections—a very trifling sum, if the good which it is calculated to do throughout the country is considered.

V. ELIHU YALE.*

ELIHU YALE was descended from an ancient and wealthy family, which, for many generations, possessed the manor of Plas Grannow, and several other messuages of the yearly value of £500, near the city of Wrexham, the capital of Denbighshire, in North Wales.

His ancestry may be traced with certainty to David Yale, Esq., who, as early as 1613, was married to Ann, daughter of the Rev. Dr. Thomas Morton, Dean of Winchester, and afterward Bishop of Chester, Litchfield, and Coventry, and Durham, in England. David Yale died in 1617, leaving three children, David, Ann, and Thomas. In the following year his widow became the second wife of Hon. Theophilus Eaton, who, about twenty years afterward, embarked, in company with his family and the Rev. John Davenport, on board the *Hector*, for America, and arrived at Boston, Massachusetts, June 26, 1637, whence they removed, in the following year, to New Haven—then known as Quinnipiac—where they arrived April 15, 1638. Of this colony, Mr. Eaton was the first governor, and was annually elected to the same office till his death, January, 1657.

Thomas Yale, the youngest of the family, and father of Elihu—the subject of this sketch—with an estate of £100, settled as a merchant, and became one of the most prominent men in the colony. In 1645, he married Mary, daughter of Capt. Nathanael Turner, of New Haven. Here their third son, Elihu, was born April 5, 1648.

Soon after the death of Gov. Eaton, Mrs. Eaton returned to England, accompanied by her son, Thomas Yale, Esq., who took with him his son Elihu, then ten years of age, to be educated. In 1659, the year following, the father returned to America, where he died, March 27, 1683. His wife survived till October 15, 1704. Though retaining, as it would seem, an affectionate remembrance of his western home, it does not appear that their son Elihu ever returned to his native town. From his subsequent career we may infer that the twenty years succeeding his arrival in England were devoted to his education and such an acquaintance with business as was to prepare him for his future duties in mercantile and official life.

In or about the year 1678, he left England for the East Indies,

* Abridged from a memoir of Elihu Yale, in the "*Yale Miscellany for July, 1858.*"

where, by his industry and enterprise, he amassed a princely fortune, and was made Governor of Fort St. George, (Madras,) on the coast of Coromandel. While here he also contracted marriage with a wealthy Indian lady, the widow of Governor Hinners, his predecessor in office. By this marriage he had three daughters, Catharine, Anne, and Ursula, of whom the eldest, Catharine, married Dudley North, Esq., son of Sir Dudley North, who was the brother of Francis, Baron Guilford, Lord Keeper; the second, Anne, married Lord James Cavendish, third son of the first Duke of Devonshire, and the youngest, Ursula, died unmarried.

After a residence of twenty years in the Indies, Gov. Yale, at that time about fifty years of age, returned to England with his family, to enjoy the fruits of his diligence and success.* To such an extent had he won the confidence and esteem of those who knew him that, soon after his arrival, he was chosen Governor of the East India Company, and still later, about the beginning of the year 1718, as a further testimonial of the high consideration in which he was held, he was elected a Fellow of the Royal Society of London.

Various circumstances conspired to direct the attention of Gov. Yale to the cause of education in New England. It was the land of his birth and childhood; and in his native town, where the bones of his parents reposed, and where many of his relatives were still residing, a new college had just been established, and was struggling to maintain itself against the adverse fortunes of a new colony, which considerations were alone sufficient to move the sympathy of a nature far less susceptible than that of Gov. Yale. But still another influence operated perhaps more directly to effect this end. By the laws of England, the paternal estate being entailed to the eldest male heir

* Collins, in his "*Peerage of England*," says: "Elihu Yale, Esq., brought such quantities of goods from India, that, finding no house large enough to store them in, he had a public sale of the overplus, and that was 'the first auction in England.'" The following bill of sale was discovered in a copy of "The Evening Post," a newspaper issued at London several months after the governor's death, and bearing date "From Thursday, March 8, to Saturday, March 10, 1722."

THE LAST SALE FOR THIS SEASON.

"Being the most Valuable Part of the Collection of Elihu Yale, Esq., (late Governor of Fort St. George,) decess'd. Consisting of Jewels, (particularly that celebrated Diamond Ring, on which is cut the Arms of England and Scotland, formerly belonging to Mary Queen of Scots,) fine Diamond and Pearl Necklaces, Gold repeating and Silver Watches, and Clocks with several Motions, Chas'd, Philligrew, and Household Plate, with several Dozens of silver Plates, and some Dishes; a large Collection of valuable Pictures and Limnings, among which is the Capital Picture of the Samaritan Woman, by the famous Vander Werf; a fine India Skreen, with great Variety of India Cabinets, and divers Sorts of Household Goods; brass Cannons, curious Fire-Arms, Mathematical Instruments, fine Snuff Boxes, Swords, and Canes; several Parcels of fine Silks, Linens, Muslins, &c. With many valuable Curiosities in Gold, Silver, and Agate, will be expos'd to View, at his late Dwelling-house in Queen's Square, near Ormond-street, till the Time of Sale, which will begin on Thursday, the 8th of March, at 11 a-clock. Catalogues to be had only at the Place of Sale, and at Mr. Cock's, near the Vine Tavern, in Broad-street, near Golden Square, St. James's."

of the family, and Gov. Yale having no son, he sent to his brother, Mr. John Yale, of New Haven, requesting him to send one of his sons to inherit the estate.* Accordingly, in the year 1712, he sent his son, David Yale, to London, who, upon his return, received an honorary degree from Yale College, in the year 1724. "These things," says President Clap, "brought Gov. Yale into correspondence with the Hon. Governor Saltonstall and the Rev. Mr. Pierpont, of New Haven, which was the occasion of his generous donations." These donations, consisting for the most part of books and goods, and varying in amount, were made at sundry times from the year 1714, at which time he sent forty volumes of books in Mr. Dummer's collection, till the year of his death. About three years subsequent to the first, he sent above 300 volumes in addition, both of which parcels were estimated at £100. In the following summer he sent goods to the value of £200 at prime cost, together with the king's picture and arms,† and three years later he sent to the value of £100 more, which two collections were sold for an equivalent of £400, these donations amounting in all to five hundred pounds sterling.

The following extracts relating to these donations, are from letters addressed by Mr. Dummer to Gov. Saltonstall. Under date of London, March 12, 1717-18, he writes: "I am endeavoring to get you a present from Mr. Yale for the finishing your college, of which I shall write you more particularly in a little time."

After the long and bitter controversy in relation to the permanent locality of the institution, which resulted in its final establishment at New Haven, Mr. Dummer writes, April 14, 1719:—

I heartily congratulate you upon the happy union of the colony in fixing the college at New Haven, after some differences, which might have been attended with ill consequences.

Mr. Yale is very much rejoiced at this good news; and more than a little pleased with his being patron of such a seat of the Muses; saving that he expressed at first some kind of concern whether it was well in him, being a Churchman, to promote an academy of Dissenters. But when he had discoursed the point freely, he appeared convinced that the business of good men is to spread religion and learning among mankind, without being too fondly attached to particular tenets, about which the world never was, nor ever will be agreed. Besides, if the discipline of the Church of England be most agreeable to Scripture

* Mr. Jeremiah Dummer, Jun., agent in London for the colony of Connecticut, writes to Rev. Mr. Pierpont, of New Haven, dated 22d May, 1711, as follows:—"Here is Mr. Yale, formerly Governor of Fort George, in the Indies, who has got a prodigious estate, and now, by Mr. Dixwell, sends for a relation of his from Connecticut, to make him his heir, having no son. He told me lately that he intended to bestow a charity upon some college in Oxford, under certain restrictions which he mentioned. But I think he should much rather do it to your college, seeing he is a New England and, I think, a Connecticut man. If, therefore, when his kinsman comes over, you will write him a proper letter on the subject, I will take care to press it home.

† Charles I., by Sir Godfrey Kneller, now deposited in the South room of the Trumbull Gallery. Some overzealous patriot destroyed the king's arms during the Revolution.

and primitive practice, there's no better way to make men sensible of it, than by giving them good learning.

Mr. Yale's picture* at full length, with his nephew's on the same canvas, is drawn for a present to your college hall, and he'll send you, by the same conveyance, another parcel of books, part of which he has promised me shall be the Royal Transactions, in 17 volumes. He proposed sending you a pair of globes; but when I told him you had two pair already, we agreed that in lieu of them you shall have some mathematical instruments and glasses, for making philosophical experiments, as microscopes, telescopes, and other glasses for use, as well as for ornament and curiosity.

I have some books and other things for you of my own collection, which I'll either put up separately or pack them with what Mr. Yale sends.

The following, dated Feb. 25, 1720, (1721,) probably refers to the last of his donations noticed in the list above:—

Mr. Yale has shipped a hundred pounds sterling in goods for your college. This, however, is but half what Mr. Yale promised me a month ago, when he assured me he would remit you £200 sterling per annum during his life, and make a settled annual provision to take place after his death. But old gentlemen are forgetful. I was with him last night, to refresh his memory about the books, pictures, and other presents, which I formerly mentioned to you, and to see if they could be ready to go with the goods, but it seems they won't be in order 'till a month hence. I shall be glad if they are ready then.

By the munificence of Governor Yale, the trustees of the new college were enabled, soon after receiving his second donation, to complete a large and commodious edifice,† which, in honor of this distinguished benefactor, they named Yale College,‡ and entered upon record a memorial thereof in Latin, of which the following is a translation:—

The Trustees of the Collegiate School, constituted in the splendid Town of New Haven, in Connecticut, being enabled, by the most Generous Donation of the Honorable *Elihu Yale, Esq.*, to finish the College House, already begun and erected, gratefully considering the Honour due to such and so great a Benefactor and Patron, and being desirous, in the best Manner, to perpetuate to all Ages the Memory of so great a Benefit, conferred chiefly on this Colony: We, the Trustees, having the honour of being intrusted with an Affair of so great Importance to the common good of the people, especially of this Province, do with one Consent agree, determine, and ordain, that our College House shall be called by the Name of its Munificent Patron, and shall be named **YALE COLLEGE**: that their province may keep and preserve a lasting Monument of such a Generous Gentleman, who, by so great a Benevolence and Generosity, has provided for their greatest Good, and the peculiar Advantage of the Inhabitants, both in the present and future Ages.

This occurred on the occasion of the first public commencement held in New Haven, September, 10, 1718, "where were present," in the language of President Clap, "besides the Trustees, the Honorable

* This picture was unfortunately never received; and probably nothing in this collection ever reached the college.

† This structure stood on the south-east corner of the present College Green, fronting College street. It was constructed of wood, one hundred and seventy feet long, twenty-two feet wide, and three stories high; containing nearly fifty studies, besides the Hall, Library, and Kitchen, and cost about £1000 sterling. It was raised October 8, 1717, and completed in the following year. It was demolished in October, 1782; a part having been pulled down six or seven years before.

‡ This name, though originally applied to the first "College House," was used indiscriminately to designate this and the Collegiate School, until, by the charter of 1745, it was applied to the corporate body.

Gurdon Saltonstall, Esq., Governor of the Colony of Connecticut; the Honorable William Taylor, Esq., as representing Governor Yale; the Honorable Nathan Gold, Esq., Deputy Governor; sundry of the worshipful Assistants; the Judges of the Circuit; a great number of reverend Ministers; and a great concourse of spectators."

On this same occasion the Trustees sent to Gov. Yale a letter of thanks, of which the following is an exact transcript:—

HONOURABLE SIR:

The Trustees of the Collegiate School of Connecticut, fixed in the Ancient famous Town of New Haven, have Convened on our Academical Solemnities, where we have had the Honour done us of Seeing the names of the famous Books sent us from y^r Hon^r appearing in the Catalogue of the Books of the Noble Spirited Benefactors of our School, and of Knowing your most Generous Bounty of a Large Quantity of very agreeable Goods, together with a further Ornament of choice Books, his Majesties Picture and arms are safely Arrived at Boston, and had the Happiness of the Hon^{ble} Coll. Taylor, Representing y^r Hono^r, Gracing the Solemnities of our Commem^t. In whose presence a great number of Learned men and y^e fautors of Learning attending, we the Trustees in the Large and Splendid Hall of our Building, Have done our School the Honour of naming it with your Illustrious name and have called it Yale-Colledge, and read off a Memorial of it in the Lattin Tongue, And also a Memorial of the Same in the English Tongue, answered with a Counterpart in Lattin, which Coll. Taylor was pleased to say was very agreeable to him representing y^r Hono^r. From the Hall the Schollars in the way usual walked to the meeting house, where in the presence of the Hon^{ble} Gov^r Saltonstall and his Generous Lady, the Hon^{ble} Coll. Taylor representing your Person, the Hon^{ble} Deputy Govern^r Gold, with sundry worshipful Assistants, the Judges of the Circuit, a Great numb^r of Rev^d Ministers, and Learned men and of a great frequency, your Hon^rs bounty hath been opened with the great gratitude by the Saluting Orator, and after the Disputations were well performed, in an oration managed by one of our Body, hath been proclaimed the wonderful Goodness of a most Bountifull God, and the Benefits of Liberal Donors, and in a Distinguishing Degree the admirable Munificence of your Hon^r with warmest Prayers to the God of all grace to inrich your Hono^r more and more with all Spiritual Blessings; and that after the long Continuance of a publick blessing so rich in Good works, a multitude, who have been Satisfied with your beneficences, may receive their Generous Benefactor into Everlasting Tabernacles. Immediately after which ten Deserving proficients received their Degrees, which being given, our Hon^{ble} Governor Saltonstall was pleased in a famous Latin Speech to do us the Hon^r of Crowning the Solemnities of the Day, Extolling with profound respect your Hon^{ble} name. The Solemnities being perfected, in Colledge Order from the meeting-house we returned to Yale-Colledge Hall and Library, wherein were Generously entertained with a large Colledge Dinner a vast number, in the Library y^r Hon^{ble} Representative the Hon^{ble} Ingenuous and Generous Coll. Taylor, was pleased to seat himself at the Table of the Ladies. The Day hath with Divine countenance, been carried on in a Splendid manner. We rejoyce in the Goodness of Almighty God, who hath provided for our School so honourable a protection, and revived our Hopes that so great and Glorious a work, for the Hon^r of Almighty God, for the Service of Religion and Learning, for the Ornament and Weal of our Colony, and in particular for the accomplishment of many your worthy Relations, may, under your great name, flourish and increase in Glory. As we offer

humble and hearty Thanks to y^r Hon^r for your many bounties, so we are and shall be Constant Solicitors at the Throne of Grace, that your Abundant Charity and Liberality flowing from your Pious Breast may be found to the making very weighty your Crown of Glory to be received from the hands of adorably free grace in the Day of our Lord Jesus: and we humbly desire Leave to do our Selves the Hon^r of Subscribing

Hon^{ble} Sir, Your Hon^r's most obliged,

Most Thankful, And most obedient Servants,

James Noyes, Samuel Andrew, Samuel Russel, Joseph Webb, Joh. Davenport, Thomas Ruggles, Stephen Buckingham.

New-Haven, Sept. 12, 1718.

The Hon^{ble} Elihu Yale.

Governor Yale died at London, on the 8th, and was buried at Wrexham, on the 22d of July, 1721. The monument having become worn and defaced by time, was repaired in the year 1820, and the original inscription recut, with modifications and additions. This monument, situated in the church yard of St. Giles, Wrexham, was visited in June, 1857, by Professor Edward E. Salisbury, of New Haven, who copied the following inscriptions:—

On the east end:—

In the year of our Lord
MDCCCXX
this tomb underwent a general repair by the
Parish
to perpetuate the memory
of him who so liberally
contributed to the
improvement of the Church.

On the south side:—

M. S.
Elihu Yale Esqr
was buried the twenty-second of July
in the year of our Lord
MDCCXXI

On the north side:—

Born in America, in Europe bred,
In Afric travell'd, and in Asia wed,
Where long he liv'd and thriv'd; in London dead.
Much good, some ill he did, so hope all's even,
And that his soul through Mercy's gone to Heaven.
You that survive and read this tale take care
For this most certain exit to prepare,
Where blest in peace the actions of the just
Smell sweet and blossom in the silent dust.*

There is, at present, in the possession of Yale College, an original full length portrait of the Governor, which, on the application of President Stiles, through Samuel Broome, Esq., of London, was presented to the college in 1789, by the grandson of Catharine Yale, Dudley North, Esq., member of Parliament for Great Grimsby, and at that time owner of the family seat of the Norths, at Glemham, in Suffolk, England. From a date on the canvas, the portrait appears

* The last two lines of this epitaph will be recognized as a quotation from that noble dirge by Shirley, opening with,—

"The glories of our blood and state
Are shadows, not substantial things."

to have been executed by an executioner, and, about four years before the Governor's death.

There was an engraved likeness of Gov. Yale sent to the college at an early period, under which was placed, in manuscript, the following inscription :—

EFFIGIES CLARISSIMI VIRI D. D. ELIHU YALE,
LONDINENSIS ARMIGERI.

En vir ! cui meritas laudes ob facta per orbis

Extremos fines, inclyta fama dedit.

Æquor arans tumidum, gazas adduxit ab Indis,

Quas ille sparsit munificante manu :

Inscitiæ tenebras, ut noctis luce corrusca

Phœbus, ab occiduis pellit et ille plagis.

Dum mens grata manet mōmen laudesque YALENSÆ

Cantabunt SOBOLES, unanimique PATRES.

Which has been thus imitated by Dr. Percival :—

Behold the man for generous deeds renown'd,

Who in remotest regions won his fame ;

With wise munificence he scatter'd round

The wealth that o'er the sea from India came.

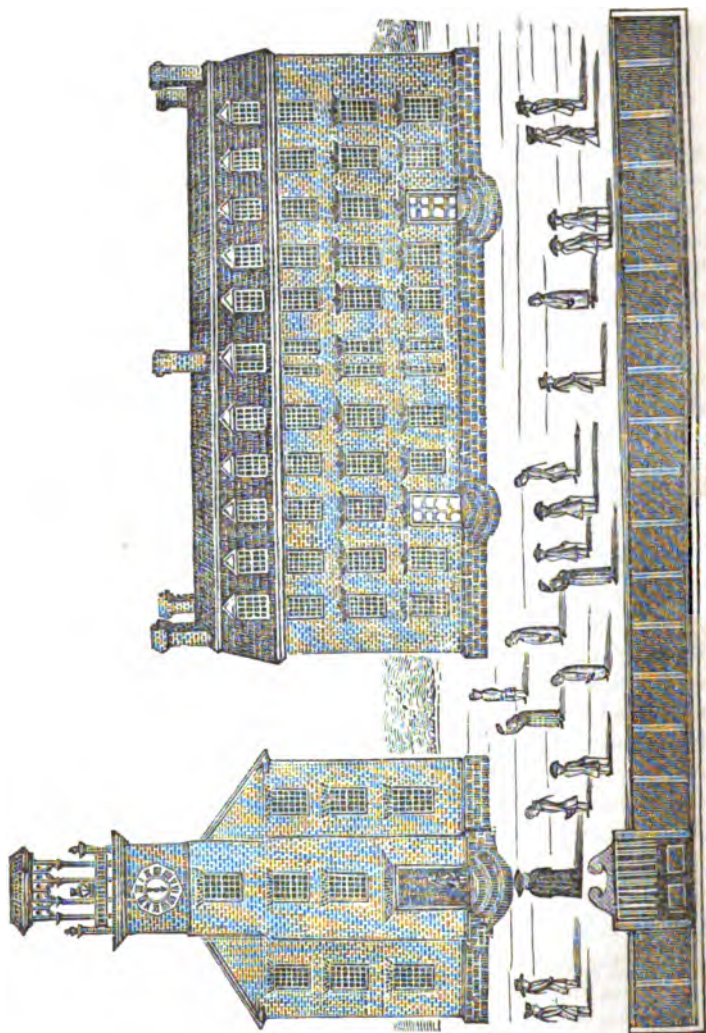
From western realms he bids dark ignorance fly,

As flies the night before the dawning rays :

So long as grateful bosoms beat, shall high

YALE'S sons and pious fathers sing his praise.

Of Gov. Yale's *generosity*, which seems to be the most striking feature of his character, it would be superfluous to speak. Were the memorable endowment, which will transmit his name to remotest ages, the only instance that is recorded of his benevolence, the mere mention of it would be eulogy enough. But it is not from the number nor the amount of his gratuities, so much as from the circumstances attending them, that he is entitled to the lasting gratitude of posterity. He gave, not to the Yale College of the present day, claimed by a nation and known to the world, but to a humble colonial school, which had hardly secured "a local habitation and a name ;" and to this, not in the full tide of prosperity, when its benediction could give eclat to the bestowal, but in the critical period of its history, when, amid the discouragement of friends, it was struggling between life and death. It was enough for him to know that a worthy cause was suffering for aid, and, in conscientiously following the dictates of a generous nature, regardless of personal considerations, he has unconsciously secured to himself that immortality for which myriads of the selfishly ambitious have lived and died in vain. Verily, in the words of his own family motto, "*Premium virtutis Gloria,*" but this noble act teaches a higher lesson ; and may we not hope that its richest fruit is yet to be realized in those who, inspired by this illustrious example of benevolence, shall "cast their bread upon the waters," to be found by coming generations ? If there is any thing in the consciousness of duty performed, of happiness conferred, or of gratitude received, to move the heart of benevolence and humanity, the "name and praises" of Elihu Yale should be a standing exhortation for all coming time, to "go and do likewise."



YALE COLLEGE IN 1764.

The following eloquent passages, being the conclusion of the "*Address delivered before the Society of the Alumni of Yale College, July 28, 1858, by F. A. P. BARNARD, LL.D., Chancellor of the State University of Mississippi,*" presents in a striking light the influence of Yale College, through her annual contribution to the educated mind of the country.

"In conclusion, my thoughts revert to the point from which they started, to this venerable institution, which has contributed so abundantly to the creation of the influential class, whose high responsibilities I have been endeavoring to enforce. Hardly a seminary of learning in the country can boast a larger list of living alumni than this. Probably not one can justly claim to have done more, through her sons, for the enlightenment of the world, for the advancement of religion and morality, and for the encouragement of every species of philanthropic effort. Among your number, my brethren, are doubtless many, for whom, as for myself, the priceless teachings which we here enjoyed constituted the sole patrimony with which you entered upon life. Among you are many whose lives, like my own, have been devoted to the endeavor to transmit to others, according to your ability, the benefits which you here received. Such antecedents are peculiarly adapted to quicken our appreciation to-day, of the powerfully salutary influence which the mighty stream of cultivated intellect, ever here flowing forth into the world's great ocean, carries with it into the social life, and exercises over the public sentiment of its time. In the contemplation of this unceasing efflux, there is something deeply impressive, singularly beautiful, almost sublime. And when, after years of drifting over the face of the great deep, sometimes in cloud and tempest, sometimes in sunshine and calm, sometimes cheered by the companionship of congenial natures, and sometimes isolated amid a dreary waste of unsympathizing humanity, we come back here at last, and behold the mighty stream still flowing on, it is this unflinching constancy which, among a thousand exciting associations, most forcibly arrests our attention, and we almost forget to magnify the beneficence of the stream, in our admiration of its steadiness. We too were drops in this stream. To ourselves we may have seemed to form no insignificant portion of its volume. It swept us out into the wide ocean, and remained no less full than before. How is it, we involuntarily inquire, that a supply so unceasing is maintained? And as the imagination follows up the similitude just presented, of the river in its relation to the ocean, we discover in it an analogy which at once illustrates and pleases. For when we look for the hidden sources of supply by which the natural streams are fed, we find them in many peaceful little fountains, lurking in quiet and secluded retreats, and embosomed in the herbage which their own sweet waters cherish, fountains over which the graceful willows lean lovingly, around whose brim the mosses and the wild flowers gather, and into whose crystal wells the bolder rushes step confidently, and bathe their shining feet ;—fountains which,

as they sparkle amid the foliage, seem like the eyes of earth peering, through her tresses, into the blue heaven above, and giving back from their serene depths the counterpart of its calm tranquillity. And so, when we seek here to know whence come the many young and animated faces, which, in ceaseless succession, appear to take the place of others which the educational stream has swept onward into the world, we shall trace them in like manner to the quiet homes of the people, embosomed it may be, like the fountains, in rural retirements; like them, perhaps, diffusing beauty all around them; like them, to outward seeming, clothed in loveliness; and like them, too, wearing heaven's own serenity within.

Will you pardon me, if I pursue, for a moment, an analogy illustrative of its subject in more aspects than one. In the great ocean, toward which the river tends, the waters however seemingly pure, are charged with many things bitter and noxious, foreign, indeed, to their nature, but yet too intimately blended with them to be separated. Yet in those gem-like fountains, where those same waters first bubbled sparklingly up, the delicate water-lily, purest and sweetest of flowers, laid her cheek lovingly upon their bosom, unharmed; and the silver trout, which shuns by instinct every trace of impurity, frolicked in the ripples which glittered along their ribbon-like outlets. Such too is the contrast between the great world, with its moral contamination, and the happy and beautiful innocence of childhood at home. When inexorable time, and the unpausing stream of life, sweeps us at length from beneath the sheltering banks, which lent protection and tranquillity to the still current of our educational career, among all the unanticipated revelations which opening life brings with it, none surprises us sooner or affects us more painfully, than that which tells us how much wickedness and crime the world contains. And though I would not insist on the similitude so far as to say, that as the sweet waters of the discharging streams are forced to appropriate their equal proportion of the nauseous ingredients which vitiate the purity of ocean, even so each innocent spirit which mingles in the great flood of life must share in like degree in the general contamination, still it is too probably and painfully true that no human being who lives, however excellent or watchful or prayerful or pious he may be, succeeds in keeping himself altogether and absolutely unspotted from the world.

There is another particular in which the ocean, in its contrast with its sources of supply, presents a parallel to the life of man in youth and maturer age. Among the features which enchant in the aspect of the secluded fountains, none is more impressive or pleasing than their sweet repose. But an agitation so unceasing disturbs the stillness of the mighty deep, that the ocean has become the most proverbial of all the types of restlessness. Though every wind be hushed to rest, and every visible cause of disturbance cease to operate, yet does not quiet any the more return to the vexed abyss. For there are causes, which the eye fails to detect, pervading all its secret and impenetrable depths, and forbidding tranquillity ever more to reign in the bosom of the vast profound. A temperature ever fluctuating generates mighty currents, which hurl the

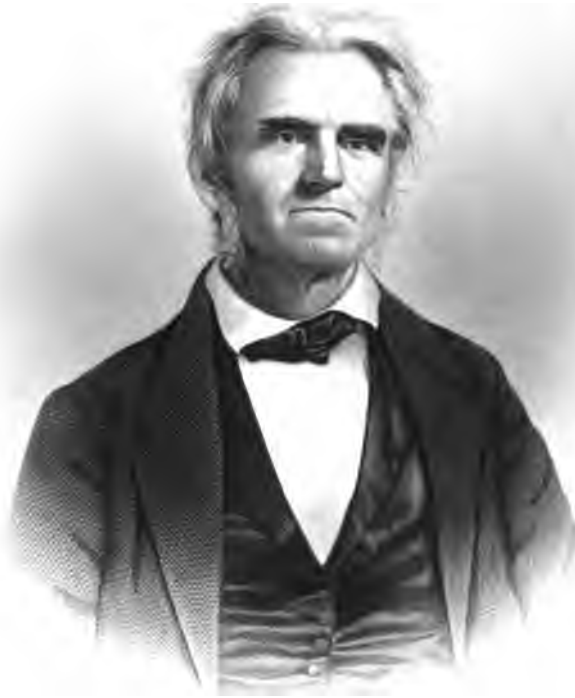
impetuous waters with headlong violence against their continental barriers, where they dash their crests against the rocks, or roar out their rage upon the sands forever. And even thus, in the great ocean of humanity, the heats of passion are perpetually stimulating disturbances, which whirl multitudes insanely on to break their strength upon insurmountable obstacles, and fill the world with unfortunate and bootless clamor. In like manner, also, as the heaving tide-wave lifts itself as if with earnest effort upward, and struggles as it were to follow the distant and retreating moon, so too that craving nature, which finds nothing palpable on earth to satisfy its aspirations, still restlessly and vainly strives to reach the imaginary and the unattainable.

Now any one who may have observed what happens wherever any great stream, descending from the land, pours out its gathered waters into the bosom of this agitated and restless or angry deep, must have marked how the purer waters rise at once to the surface, and spread themselves out in a vast stratum, distinguished from that which it overlies no less by its superior buoyancy than by its superior freshness. And precisely thus does the great tide of cultivated intellect, outflowing from our seminaries of higher learning, tend naturally and resistlessly upward; assuming as its rightful and fitting position a level of positive superiority over surrounding ignorance, enabling it to command the respect, and to a great degree to master the prejudices and passions, and to control the actions of men: a position of moral power from which it can no more be thrust downward, than, reversing the laws which govern the material world, the river can be made to flow beneath the sea.

A single further point of resemblance only need be suggested, to render the analogy complete. The waters of the countless tributaries which seek the ocean are not destined to make that vast and troubled reservoir of bitterness their perpetual abiding place; nor does the great flood itself, notwithstanding the unceasing accessions to its volume, grow ever any the more full; for over all its extended surface there is going forward constantly a process of silent exhaustion, to which, transformed by the mysterious influence of the solar radiance, the dense fluid lays aside its gross and palpable properties, and, gifted with viewless wings, bursts from the embrace of its impurities, and soars away spirit-like to heaven. Nor shall it be ours forever to remain stagnant and sullied drops in the great ocean of mortality; but, in the great change which awaits us all, we shall surely pass away and disappear, and as whatever is material of our bodies shall dissolve, we may, if we will, along with our perishing frames, put off all the stains which earth has inwrought into our immortal natures, and, purified by the renovating rays of the Sun of Righteousness, be lifted to a higher than this visible heaven—that heaven of celestial splendors, illuminated by God's own presence, which sorrow never enters nor sin defiles.

Then, my brothers, shall we at last be able fully to comprehend the end and purpose of all our education in this little life of earth. Then shall the powers of intellect, awakened and expanded and strengthened by

laborious culture here, address themselves, with a fullness of satisfaction which it has never yet entered into the heart of man to conceive, to the contemplation and study and enjoyment, in all their profundities of mystery, of the infinitely varied manifestations of the power and wisdom and goodness of God. Then, too, shall that moral discipline, which forms so severe a portion of our present trials, bring forth the fruits which it was designed to produce; and the victor, at last triumphant in the world's exhausting conflicts with sin and temptation, shall be crowned with a crown of rejoicing and welcomed to an inheritance incorruptible, undefiled, and which fadeth not away. Then, at length, shall the work of education cease—a work which, in its very nature, implies a state of slumbering intellectual life, and of undeveloped faculties of judgment and reasoning and reflection; and then shall all created intelligences become learners together, advancing perpetually from enjoyment to enjoyment, as they rise from knowledge to knowledge, with eternity only to limit the expansion of their powers or the enlargement of their attainments; and with God himself, in all the infinity of his perfections, for the exhaustless subject of their adoring study."



Very Respectfully yours
Saml. Lewis

W. A. Lewis & Co. Printers, New York

the first of these is the fact that the
the second is the fact that the
the third is the fact that the
the fourth is the fact that the
the fifth is the fact that the
the sixth is the fact that the
the seventh is the fact that the
the eighth is the fact that the
the ninth is the fact that the
the tenth is the fact that the



My dear Sir,
I have the honor to acknowledge the receipt of your letter of the 10th inst. and in reply to inform you that the same has been forwarded to the proper authorities for their consideration.

VL SAMUEL LEWIS.

BY WILLIAM T. COGERSHALL,

Editor of the Ohio Journal of Education.

SAMUEL LEWIS, the first superintendent of common schools in Ohio, and the most efficient promoter of a system of public instruction in that state, was born at Falmouth, Massachusetts, March 17th, 1799. His ancestors, on his mother's side, were of the original pilgrim stock, at Plymouth. His father was a sea-faring man—the captain of a coasting vessel; and Samuel, when not more than eleven years of age, was often a cabin-boy on voyages which involved perilous exposure. His opportunities of education were limited, even under the circumstances in which his boyhood was passed; but he early manifested a thirst for knowledge, and he was an upright, reflecting boy. At the age of ten years, he was a member of the Methodist church, and before he was twelve years old gave evidence of those persuasive powers by which he was afterward distinguished as a public advocate.

His father, having met heavy losses at sea, determined to emigrate to the West. In the year 1813, the family, consisting of father, mother, and nine children, journeyed from Falmouth, Massachusetts, to Pittsburg, Pennsylvania, with one wagon, drawn by two horses; the father and his five sons walking the entire distance. At Pittsburg a small flat-boat was purchased, from which, after a tedious voyage down the Ohio river, Mr. Lewis landed his family at Cincinnati. He immediately settled upon a farm near that city, and when Samuel was fifteen years of age, hired him out to work on a farm, at seven dollars a month. The boy's employer was a mail contractor, and very soon Samuel was the mail carrier between Cincinnati and Chillicothe. He traveled on horseback. The trip occupied seven days, and sometimes two nights, amid perils arising in the new country from high water, imperfect roads, and forest rangers of various classes. A better opportunity offering to him, young Lewis went, with a party of surveyors, into Indiana. He spent several months in the forest, and then, having determined to learn a trade, hired himself to a carpenter, and applied his energies diligently to the study and practice of the art of house-building. He was industrious, tem-

perate, and skillful, and became a respected workman. From the time he was a farm-boy, until he worked as a journeyman carpenter, he continued, as regularly as his laborious duties would permit, to read whatever books of good character he could obtain, devoting the time which too many of his fellow workmen spent in idleness and dissipation, to study, which fitted him the better for his mechanical labors, and which won the respect of all who formed his acquaintance. Thirst for knowledge, and desire for the influence which its acquaintance and good use imparts, led Mr. Lewis to seek a wider sphere of activity; and, in the year 1819, he resolved to study law. He was then twenty years of age. He had paid his father fifty dollars a year for five years, for his time; and had one year yet to work in before attaining his majority. His good character, and available intelligence, secured him a place in the clerk's office of the court of common pleas of Hamilton county. His salary was thirty dollars a year and his board. Judge Jacob Burnet consented to become his legal instructor, and he made an arrangement with his employer, the county clerk, by which he was to be allowed to board himself, and to receive, for so doing, one hundred and twenty dollars a year. His income was, then, one hundred and fifty dollars, out of which he was to pay his father fifty; and, with the remainder, board and clothe himself, and buy the books he wanted, which he could not borrow. His diet was, literally, bread and water; his clothing, the cheapest he could purchase. He was obliged to work all day at his desk in the clerk's office, and had only the night time for his law studies; yet, on the second of April, 1822, he was admitted to the bar, after an examination which gave him favor with several influential lawyers. His industry, frugality, temperance, and probity, were known to men who had business before the Hamilton county courts, and Mr. Lewis immediately secured a remunerative practice. He soon became distinguished as an advocate, and he maintained a respectable position as a counselor.

Out of the first proceeds of his efforts at the bar, Mr. Lewis bought a farm for his father, and contributed money for the education of his younger brothers and sisters. As his business increased, and his income augmented, he improved his father's farm. In 1823, he married Charlotte E. Goforth, a daughter of an eminent physician, a pioneer in the Miami valley. In 1824, Mr. Lewis was licensed as a local preacher. He was then well known as an earnest advocate of temperance reform, and was relied upon by the advocates of popular education as a powerful coadjutor. His influential action for general education, was exerted with a friend, who, being disposed to be-

queath a fund for the maintenance of a free grammar school, was induced by Mr. Lewis, not to postpone the establishment of the school; but, while yet in active life, to set apart property for that purpose. That friend was William Woodward. The school was opened in 1830, three years before Mr. Woodward died. Mr. Lewis was appointed a life trustee, with power to nominate his successor. The property is now worth at least \$250,000; and, with another fund, known as the Hughes Fund, amounting to not less than \$60,000, of which Mr. Lewis was also a trustee, supports two high schools in Cincinnati, which, chiefly through the foresight of Samuel Lewis, are the crowning features of the common school system of that city.

Mr. Lewis was one of the earliest and most active supporters of the Western College of Teachers, which was formed in 1831. In addresses before that body, and in an address at the first state convention, 1836, he had not only displayed power to plead eloquently for popular education, but he presented views which exhibited judicious reflection upon the instrumentalities by which common schools were to be rendered popular and efficient; and, in the winter of 1837, he was elected, by the legislature, superintendent of common schools.

Mr. Lewis knew that heavy pecuniary and personal sacrifices would be required of him, if he accepted the office, but he did not hesitate. Pecuniary interest never deterred him from the straightforward discharge of a plain duty, nor did the allurements of immediate prosperity ever deter him from the frank expression of what he conceived to be important truths; but he expressed honest fears that, owing to the want of early education, which had often embarrassed him, he would not be competent for the responsibilities to which he was invited. Friends, who knew him well, assured him that these misgivings arose from a too severe estimate of the duties he would be required to discharge. Taking their counsel, he accepted the office. He brought to the position not only zeal and practical knowledge, but a capacity for work imperatively needed; capacity to travel and to speak, for which the toils of his early, and the experience of his later, life had peculiarly qualified him. He began his work in the spring of 1837. The salary which had been voted the superintendent was five hundred dollars a year.

Mr. Lewis found that, excepting Cincinnati, there were no schools in the state practically open alike to rich and poor. There were 7,748 districts, and 3,370, nearly one-half, were without school-houses. Many of the houses, in which a school was taught for two or three months in winter, were not worth ten dollars each; while not one third in the state would be appraised at fifty dollars each. He trav-

eled more than twelve hundred miles, chiefly on horseback ; visited forty county towns, and three hundred schools ; urging upon school officers augmented interest, upon parents more liberal and more active co-operation, and upon teachers a higher standard of morals and of qualifications, with an eloquence remarkable for persuasive power. He reported to the legislature of 1837 and 1838, that there had been four thousand three hundred and thirty-six schools taught, on an average, about three months in the year ; that four-fifths of the people were in favor of free schools, but demanded that they should be efficient. By invitation, he read his report to the general assembly, and he told its members that where the schools were free (in Cincinnati,) they flourished best ; but the towns generally had poorer public schools than the country, because the common schools were not so much depended upon. To overcome the difficulties which prevented the general enjoyment of free education, Mr. Lewis recommended a state fund, to be equally distributed ; better economy in the administration of school laws ; the privilege of loans for building school-houses ; the establishment of school libraries ; the publication of a school journal ; and proper care of the lands given in trust to the legislature for the support of free schools.

Certain features of Mr. Lewis' report, ought to be held in grateful remembrance. He desired that school-teachers should be required to report to township clerks. In 1835, the state auditor had been requested to inform the legislature of the number of schools in the state, and the number of white youth attending them. He was authorized to call upon county auditors for the information. Only thirty-three out of seventy-one counties responded. No county in the state reported fully. In 1837, Mr. Lewis advocated also the propriety of arranging districts and schools in corporate towns and cities, under one board of education, with power to hold evening schools ; and he thought it would save special legislation, to pass a general law, giving townships a right to organize high schools or seminaries, whenever they demanded a higher grade of instruction than could be secured in district schools. Again, he saw no reason why orphan asylums should not be allowed something toward the education of the youth under their charge ; and he was in favor of a superintendent of common schools in every county.

The report, embodying these far-seeing suggestions, was made to a general assembly distinguished for ability. Its leading men have since filled important state and national offices. In the senate, were Benjamin F. Wade, David Starkweather, and Leicester King ; in the house, John A. Foot, Seabury Ford, James J. Farran, Otway Curry,

Alfred Kelley, William Medill, W. B. Thrall, W. Trevitt, and Nelson Barrere.

The superintendent's suggestions were respectfully considered; and the committee on schools, stimulated by his assiduous attentions, and guided by his experience, prepared a bill, which Mr. Van Hook, from Butler county, presented to the house, on the 5th of February, 1838. Without essential change, though opposed with determination, it passed that body, by a majority of twenty-six. In the senate, frequent attempts were made to change its practical character, or postpone final action upon it; but, on the 3rd of March, the final vote gave it seven majority; and, by the concurrence of the house in slight amendments which the senate had imposed, it became a law the same day.

It created a school fund of \$200,000, to be distributed equally throughout the state; imposed a county tax of two mills; provided local school officers; made county auditors and township clerks; county and township superintendents; authorized district taxes for school-houses; required reports from teachers, and from township and county superintendents; gave incorporated towns and cities a board of education, with power to establish schools of a higher grade than was common; required county examiners; made the office of state superintendent permanent—the officer to be elected every five years, and have a salary of twelve hundred dollars, and to be the editor of a monthly journal, published at the expense of the state, and circulated among school officers and teachers.

Mr. Lewis promptly prepared to exercise his faculties to their full capacity in securing attention to, and execution of, the new law. His report had been favorably received by the people, and the prospect was fair for the practical working of the school system as revised. The first number of the "*Common School Director*" was issued by the superintendent, in May, 1838. He announced that it was his intention to visit every county of the state. His appointments were immediately arranged and published, and he urged school-teachers, school officers, and friends of education to meet him; declaring that nothing but sickness or death would prevent him from fulfilling his engagements. Thus, in addition to his regular labors as editor and general school director, he assumed an enormous task—one which required him to ride, day after day, on horseback, thirty-five and, sometimes, forty miles. Whether Mr. Lewis met any stirring or romantic adventures in his wild rides, I can not say; but I know that he was almost every where encouraged with evidences of a growing interest in schools; and, by his private advice, public appeals, and

familiar arguments, he gave a vigor to educational sentiment which found expression in county educational conventions; increased the number of teachers' associations; and secured a representation at a state educational convention, in Columbus, in December, 1838, which most positively declared that the cause of popular education was gaining decided triumphs. In April, 1838, an educational paper had been started in Akron, Ohio, by E. L. Sawtell and H. K. Smith, called the "*Pestalozzian*." It seconded Mr. Lewis' appeals in the "*Common School Director*," in behalf of the state convention, and was of important service. I have seen a call for a state convention in 1837, but can find no report of a meeting. The meeting in 1838 was attended by nearly one hundred delegates. Wilson Shannon, then governor, was elected president, and Milo G. Williams, first vice-president.

In the "*School Director*" for November, Mr. Lewis had made an especial appeal to school-teachers. He said reading was attempted to be taught in all the schools, but arithmetic was not, in many, and that, with geography, it ought to be in all; while history, and the elements of chemistry and philosophy, ought not to be neglected. Grammar had not yet become a branch of *common* school instruction; therefore, the subject of normal schools was a fit one for the convention; and Calvin E. Stowe delivered an able address upon the necessity of schools for teachers. Addresses were also delivered by Rev. Dr. Pearce, then president of Western Reserve College, and W. H. McGuffey. Resolutions were passed, sustaining Mr. Lewis as superintendent; recommending music as a branch of instruction in common schools; asking for a teachers' seminary at Columbus; and urging upon teachers the importance of liberal efforts to elevate the profession.

Mr. Lewis, in 1838, visited sixty-five counties—all but ten in the state—in which he delivered addresses, and studied the condition of schools, and the wishes of the people. From the information thus gained, he had no doubt that a large majority of the people were in favor, and comparatively few opposed to the new law. But time enough had not elapsed to enable the warmest friends to witness the full operation of the system. It was, to two-thirds of those who were active, a new work, and in many places an arduous one. The burdens of the law had yet only been fully known, and the people were just about to realize the results of the liberal legislation of the last winter; yet it was evident every where that the year 1838 had witnessed a more rapid and extensive development of public enterprise and effective action for common schools, than had been

known at any previous period. Mr. Lewis thought there was too much effort to tax the memory, and not enough to develop the powers of the mind, and great neglect of education for girls. He asked for some change in the law, which would allow German schools in districts where a majority of the people spoke that language; he repeated his suggestion of authority for loans in districts to build school-houses; he plead for ventilation, and *humane* seats and desks; asked for increased power over schools for corporate authorities; again suggested the need of evening schools, and of county superintendents, independent of auditors' offices; prayed for school libraries; and pressed his idea of central township schools or academies.

This was a favorite measure with Mr. Lewis. He had delivered a lecture upon it before the college of teachers.* He desired a law, giving all the school directors in a township power to establish a central school, with a board of education, having authority to assess such a tax upon the township as would support it.

Before Mr. Lewis' report had been read, a resolution had been offered in the house, and one was soon after presented to the senate, asking that the office of superintendent of common schools be abolished. They were laid on the table. There was dispute upon the printing of the report; and attempts were made, till late in the session of the legislature, to abolish the state fund; to release township superintendents; to make the state auditor state superintendent; and to reduce the tax. All these attempts failed, however, except the last. Mr. Lewis had a strong hold upon the people, and the legislature appreciated it. The law was so amended as to allow county commissioners to reduce the tax to one mill, but in other respects it was improved; although the publication of the "*School Director*" was not ordered, and county commissioners were authorized to excuse township clerks from serving as school superintendents for a second year. All of Mr. Lewis' important suggestions were embodied, excepting those on libraries and township high schools. His exposition of abuses in the lease and sale of school lands had cost much labor, but were of a value which can not now be fully estimated. They were added to labors arduous enough, but to them was also added other extra duties, requiring much thought and investigation.

The legislature of 1837-8, had instructed Mr. Lewis to report upon

* This lecture was delivered at Cincinnati, in October, 1837. Mr. Lewis had been appointed to report on the expediency of adapting common school education to the entire wants of the community. He spoke on the expediency of making the course of instruction in public schools so ample and various as to meet the wants of all classes of citizens. He proposed central township schools, equal to the preparation of a student for college, as practically advantageous and economical.

the expediency of establishing a state university for teachers, and upon the best plans for the conduct of such an institution. He responded to this request in an elaborate report, which was submitted in February, 1839. It is a document creditable to the State, and ought to be more widely known than it is. Many passages deserve repeated quotation. It sketches graphically the graded school of the present Ohio system; describes common schools as they were in Ohio in 1834-5-6; dwells upon what they ought to be, depicting very clearly what they are, in many respects, now; suggests teachers' institutes; and shows, most conclusively, that a teachers' seminary ought to have been established at the Capital.

Mr. Lewis' health had been impaired by the severity of his labors, and the exposures to which he had been subject. He did not, however, abate his zeal, but contributed articles to the newspapers, issued circulars to county commissioners, to auditors, to teachers, and parents (which are models of their kind;) made his third annual report; and resigned his office.

During 1839, a "*Common School Advocate*" was published monthly, for gratuitous circulation, in Cincinnati, and it liberally quoted from Mr. Lewis' communications. The press of the state generally was liberal toward him, and toward the cause of common schools, and should not be forgotten when we consider the influences which have promoted their adoption and elevation. There were more county educational conventions, and better ones, in 1839, than there had ever been; and the state convention in December of that year was more largely attended, and was more influential, than any previous one. Samuel Lewis delivered an address on "common schools, and their effects upon pecuniary interests;" W. H. McGuffey, one upon "private schools, and their influence on common;" Milo G. Williams spoke upon "the claims of national science in public schools;" and Warren Jenkins, who had just issued a manual of the Ohio school system, lectured upon "Ohio school laws." The convention adopted firmly progressive resolutions. Governor Shannon applauded the school system in his annual message, and deprecated essential change; but the legislature had not been in session many days, before it was evident that the school system was in danger of being impaired. The superintendent's report was presented to the house, on the 13th of December, 1839. It was not as elaborate as his first or second; but it reviewed the school law, and declared it to be the best of any with which Mr. Lewis was acquainted. In one of his circulars he had said that he found opposition oftenest among those who had not read the law, or those who had read and studied, that

they might misrepresent it; and, in view of these facts, he urged, again, the need of county superintendents; devoted considerable space to the education of the poor; and defended the common schools from the imputation that they were institutions of charity. He asked for the publication of the laws and forms; presented clearly the necessity for a state superintendent; and reported the general state of education to be encouraging. Reading, writing, arithmetic, and grammar, were taught in most of the schools; they had been kept open, on an average, four months; and the average wages of teachers were \$16 per month for males, \$10 for females.

Mr. Lewis had, in his first report, represented the advantage of employing young women as teachers in elementary schools; and, under his administration, the proportion of schools intrusted to them was largely increased.

When the legislators had received his report, they disputed about the number of copies which ought to be printed; and, in the house, a facetious debate sprang up, which, in one respect at least, illustrated the temper of a portion of the members. A certain gentleman was opposed to the printing, unless his constituents could have copies in German, because they could not read English; another member demanded copies in Welsh, because his constituents could not read either English or German; and another member said that a portion of his constituents could not read at all, therefore he was opposed to the printing, unless a committee was appointed to go around and read the report to them. The house voted to print five thousand copies, in *English*, and the senate concurred.

Skillful attempts were made, from time to time, to impair the efficiency of the school law; but most of them were sternly resisted. Three different bills were introduced to the house. There were debates on reducing the superintendent's salary; on abolishing the office; or giving it to the state auditor or the state secretary. The house and the senate could not agree. They had duplicate committees of conference. The house adhered and the senate insisted. On the last day of the session the friends of the school cause succeeded in bringing the two houses to an agreement, in which the school law was left intact, but the office of superintendent, with \$400 to employ a clerk, was added to that of the secretary of state.

Mr. Lewis had been paid \$500 for one, and \$2,400 for two years; but he received nothing for his time or labor, his salary serving only to pay his expenses when required to be away from home. His friends claimed that he had saved the state, or the school children in the state, \$60,000 by his school-land investigations and exposures;

and not even the bitterest enemies of the school system denied him commendation for zeal, industry, and popular ability; while, with one voice, educational men have since declared that, by his labors, the whole educational tone of the state was elevated and set forward.

The following extracts from an account of Mr. Lewis' services, in a biography by his son, Rev. William G. W. Lewis, does not too highly estimate the good work which he accomplished.

It is certain that what he did to awaken public attention to abuses which had been committed in the leasing and selling of school lands, aroused the only opposition which arrayed itself against him; and the only dissatisfaction expressed with his general labors, sprang from among school officers and school-teachers, who were unwilling or unable to reach the standard of industry, zeal, and intelligence which the superintendent desired.

The following abstract of the statistics in Mr. Lewis' reports presents a flattering picture of school progress, during the three years of his official labors:—

Years.	No. Schools.	No. Scholars.	No. Teachers.	No. of Months Taught.	Amount paid for Tuition.	No. of School-Houses built.	Cost of School-Houses.
1837.....	4,336	150,402	7,962	92,168	\$317,730		\$ 61,890
1838.....	4,030	106,566	7,515	86,671	468,065	671	65,732
1839.....	7,295	254,012	7,228	96,199	701,091	731	206,445

Governors, secretaries of state, and educational men of wide knowledge, have, almost without exception, from 1840 till the present time, borne willing testimony to the fact that, by Mr. Lewis' industry, wisdom, and eloquence, the whole educational tone of the state was elevated, and the most fruitful seeds were sown for that which bears now to every child in Ohio the privilege of a good education. No one, who studies the events of his superintendentship, and the results which have followed it, with an unbiased mind, will dispute even higher claims for Mr. Lewis, as a friend of popular education, than we now set up.

It is not to be denied that, in the present excellent school system of Ohio, the forethought and practical suggestions of Samuel Lewis, put on record in 1837, 1838, and 1839, are embodied to a greater extent than those of any other man. The school law, adopted in 1853, was rather a codification of old laws than a new act, except in so far as it recognized practically the great doctrine that the property of the state should educate the children of the state, and authorized a state commissioner, school libraries, and graded departments. All of these important measures Mr. Lewis repeatedly urged, in his reports, and in public addresses.

Mr. Lewis had not been prominently identified with any political party, but had voted with the whigs; and, in 1840, was urged to become a candidate for the office of secretary of state. The transfer of the superintendence of common schools to that department of the government, was a good reason for the nomination of Mr. Lewis as secretary; but he declined. Though he supported General Har-

rison for the presidency, he was, in 1841, an active and influential member of the liberty party, then organized in Ohio. In 1842, he was that party's candidate for the state senate in Hamilton county; in 1843, was its candidate for congress, from Hamilton; and, in 1846, was the liberty party candidate for the governorship of Ohio. In 1847, he was the president of the national liberty convention at Buffalo; in 1848, was again a candidate for congress; and, in 1851, was a second, and, in 1853, a third time the liberty party candidate for governor. His first vote for governor was 10,797, his last 50,346; but the average vote for other candidates on the ticket was 34,345. In all the campaigns, he was a zealous worker. He "stumped" the state four times, making speeches distinguished for a persuasive eloquence, which renders his memory dear now to many good men and women in Ohio. He is remembered, however, not only as a remarkable advocate for freedom, but as a most popular and efficient worker for the advancement of temperance reform, and for the promotion of other movements designed to ameliorate the condition of the unfortunate; to elevate the degraded, and to reclaim the misdirected, and reform the vicious.

Severe labors, in the campaign of 1853, very perceptibly impaired his health; and, in the spring of 1854, he said he "was sentenced with death." He had been a professing christian for more than forty years; he was free from all pecuniary embarrassments; no man was his enemy; he was the friend of all mankind; and he was prepared to die. His death occurred on the 28th of July, 1854. He was mourned, not only as a husband and father, but as a christian friend, as a useful minister of the gospel, as an eloquent orator, as an exemplary citizen, and as a self-sacrificing philanthropist. His wife and a son and daughter survive him.

A correct opinion upon the affectionate regard in which Mr. Lewis was held by those who were associated with him, may be found from the resolutions adopted by the Union School Board of Cincinnati, of which he was president.

DECEMBER 4th, 1854.—Rufus King, of the committee appointed to prepare resolutions expressing the sentiments of the Board on the virtues and valuable services of its late president, Samuel Lewis, offered the following, namely:—

"The decease of Samuel Lewis, late member of this Board, and president from its foundation, having been announced, and this Board having, in common with his friends and fellow-citizens, a deep sense of the gratitude and veneration which are due to his memory; and desiring to leave an enduring tribute to the good name and works of one whose strength and purity of character and mind, whose love for, and firm resolve to elevate, his fellow-men were such as are but rarely given to man, and are a noble incentive and guide to those who shall succeed him; now inscribe this *memorial* of him upon their journals. To him the state is much indebted for a new era in her common schools, and for invaluable services in that department to her highest councils. And amid the toils and dis-

tractions of a very active life, he was chiefly instrumental not only in advising and inducing the rich endowment created by Mr. Woodward for the cause of education, and erecting Woodward College, but he continued with constant zeal to foster it, as well as that other honorable endowment bequeathed by Mr. Hughes, for free schools; watching over their disposal, preservation, and enhancement; till, at length, when the opportunity was ripe for bestowing upon these trusts their noblest ends, he lent the whole of his zeal and talents to effect that union of the Woodward and Hughes funds with the public school system, which has opened, free and common to every child of Cincinnati, the way to a high and liberal education. Thus, through all his career, he labored in the foremost rank of the friends of universal education, and died worthy of the public honor which he wore. Therefore,

Resolved, That the death of our president has not merely deprived this Board of one of its foremost and most valued members, but has taken away from the great cause of free education, an advocate and ornament who was second to none in its roll of distinguished names; and that we thus record these sentiments, in the hope that such an example may not die, but live, to incite others to "go and do likewise."

As average specimens of Mr. Lewis' style of composition, and as fair testimony in support of what I have claimed for him, as a man of just views, and of liberal forecast, I make a few extracts from the normal university report that has been described.

There is a general spirit of enterprise pervading the community, unshackled by those artificial restraints that exist, more or less, in other nations, and were, till very lately, felt even in the older states of this confederacy. Mind seems to have multiplied its power to an enormous extent. Instead of having a few master-spirits to direct and control the mass of mind, each one of the great number that makes up that mass, is arming itself to become, in its sphere, to a greater or less extent, a master-spirit. Our people, and almost the entire world, have felt the powerful upheavings of this comparatively new energy. It is not merely physical, or merely intellectual strength. In this country it goes forth armed with the power of the government itself. To restrain it, would be as impossible, as to turn back the waters of the mighty stream of the West. It can not be restrained. But it may be guided—morally, religiously, intellectually—and thus made to fertilize and enrich; or it may be left to overwhelm and destroy.

We must see the connection that exists between eminent learning and eminent success in the different pursuits that now engage our attention; and our course of studies must adapt itself to those pursuits, to a sufficient extent, at least, to make that connection palpable. It will not be required to make the course less thorough, but rather increase it, by adding those practical subjects which are so much neglected, and making all that is called dry in study, aid us in those departments that our natural, civil, commercial, agricultural, and moral condition and relations make it indispensable for us to understand. And equally important is it, that our health should be cared for; better for our sons and daughters, that they should never pass beyond the rudiments of common school learning, than to obtain more than this at the price of sound, vigorous bodies and constitutions. The mental powers of a man are withdrawn from the world, when his body is worn out; and just in proportion as these powers are increased, and made more useful, is the body, through which they are exercised, more important. Whatever else is neglected in a college, the health of the student should be carefully attended to.

If we are to have a standard of literature of our own; if we are to have a reformation and improvement in the higher walks of learning and science; if the great book of nature is to be opened, and the science of this day, and other days, is to be made tributary to the development of the unbounded mental, moral, and physical resources of this heaven-favored land; if all the hundreds of thousands of our youth, in our common schools, are to have furnished, for as many as will improve it, the advantage for traveling the full length of this most delightful road, nor less delightful than useful; if all the colleges, now organized, are to have a point of elevation, erected far beyond their present objects, with sufficient induce-

ments to cause them to put forth increased energies; if, in short, Ohio would bring forth the cap-stone, and present to the world a system of education, embracing every department of learning, from A, B, C, to the highest possible literary attainments; then must she establish a college, or university, or institution of some other name, adapted to these great purposes.

It is now conceded that at least nine-tenths of our youth must henceforth receive their education in common schools. This brings to the support of these schools the great body of the people, who will not be contented with a second-rate teacher. Our state is multiplying her towns and villages, and in each of these there will be (where there are not now,) several schools so arranged as to make several departments, the lower of which will take the small children and those just commencing. From these lower rooms, when they have reached certain attainments, to be fixed, they will advance to another, where they will be carried on to such further point as convenience may designate. Thence, they will advance to the highest department in the school, and here will be required the most experienced and best educated teacher. He should thoroughly understand all the branches of an English education, as taught in our best schools; including the exact sciences, to a considerable extent. In addition to this, he should be well acquainted with the philosophy of the mind, and be capable of directing younger teachers, as he would frequently be at the head of a school having several departments, with children of all ages, and pursuing a great variety of studies; and, however well otherwise educated, he should have acquired a habit and love of study. He should be improvable, and try, at least, to increase his usefulness, and improve the condition of his school every month. The best educated men sometimes fail as common school teachers, because they look upon the work as beneath them. This false sentiment must be eradicated, and a good teacher of the common school, rising above such prejudices, must estimate for himself the importance of his work, and make it his glory to excel in his office.

A teacher, while instructing a child to read (if he understand his business,) can give him a tolerable knowledge of history, geography, etc.; in fact, if we intend to awaken the real intellectual power of our youth, we must teach them to think. This must begin with their first reading-lesson. To teach a child to pronounce a word without connecting it with an idea, is to teach it to be superficial in all after life. The child's thoughts must be directed to the ideas or principles contained in the lesson, and thus will be cultivated the power of concentrating the whole mind on any given object or topic, a power that is more needed, and the want of which is more felt, than any other mental ability. Were our youth to receive proper early instruction, they would not, in after life, read a page or a paragraph, without getting the ideas it contained, and they would easily distinguish on all subjects, because their habits of thought and discrimination would have been cultivated in the proper manner. But this subject, which ought to occupy the attention of every lover of his country, can not be dwelt on here to any greater extent.

As moral influence is the only power that gives efficacy to any of our institutions, youth should early be taught the habit of self-control; they should be so instructed as to make them orderly, from choice, and their choice should be based on correct motives. And, while they should observe rigidly the laws of the teacher, he should be both able and willing to show to the youth the reasonableness of law and order. To compel obedience to the law, against the youth's sense of justice, is but laying the foundation of future discontent with all government. There are no rules required in schools, of which a competent teacher can not show a reason satisfactory to nineteen-twentieths of his scholars. As moral government is substituted for adults, instead of physical power, to preserve order in a free country, so we are called on, whatever expense it may require, to give such character to our instruction, as will subject our youth to the proper influence, at the earliest possible day. More of good or ill depends on this part of education, than barely to learn reading and writing. If we are right in the kind of instruction that is given in our poorest schools, it is not necessary to describe further the kind of teachers required.

It may now be considered as a settled question, that there is something peculiar in the art of governing and teaching a school, which may be taught and

learned, as any other art or profession. There are, to be sure, many excellent self-made teachers, who have become so by long experience and labor, and there are many self-made men who are eminent, in all other professions; and, in neither case, can it be pretended that the success of one man, without superior advantages, would justify us in abolishing those institutions which are intended to aid students in such professions, or that, because a few succeed in spite of their disadvantages, therefore, all men can do so. If one man has learned to govern a large school with very little corporal punishment, he can teach another, with ordinary capacity, the same art. If one man has learned how to adapt his instruction to the great variety of minds presented in the school-room, he can teach others to do so. If he has learned a mode of approaching each mind in such a manner as to wake it up and secure at once a love of himself and the study; if he has found the art of making children reason at an early age; these, as well as all other important acquisitions in the business of teaching, can be imparted to others of ordinary capacity. Heretofore, teachers have all acted without associated effort—each sought his own, and no other interest; his experience died with him, and no record was preserved of improvements, as in other professions. To this cause may be attributed the want of improvement in a profession so important to all our interests, individually and collectively.

With the experience of other nations, and other states, as well as the success which has attended individual experiments in our own state, before me, I have made up my mind that, with teachers, educated for the business, sufficient to supply all the districts in our state, we should, with the same money that is now expended, secure to our children an education far exceeding in amount, and far superior in quality, to what is generally furnished. The advantages of associated power are felt in every other department, and may also be felt in this.

VII. REFORMATORY PHILOLOGISTS. JOHANN MATTHIAS GESNER.*

[Translated from the German of Von Raumer, for the American Journal of Education.]

JOHANN MATTHIAS GESNER was the son of a preacher, and born in 1691, at Roth, a village of Ansbach, in the Rezat. He early lost his father, but was well instructed after his death by his stepfather, Pastor Zuckermantel, and afterward sent to the gymnasium at Ansbach. Under the learned Pastor Köhler, he here acquired not only Latin and Greek, but also Hebrew, Arabic, and Syriac, and several modern languages.

In 1710, he went to the University of Jena, where he studied Hebrew more thoroughly under Danz, and attended the theological lectures of Buddeus, to whom he became much attached. This teacher had long entertained the wish that a great want in the university should be supplied. After their university studies, most of the theological students went into situations which required positive pedagogical knowledge and efficiency. Many became school officers, many tutors, and still others school inspectors. But in the university there was not the least pains taken to prepare the students, in any measure, for these duties. This want, Buddeus thought, could be best supplied by the erection of a pedagogical seminary. In the young Gesner he believed that he had found the right man to be placed at the head of such an institution. He therefore induced him to write the "*Institutiones rei Scholasticæ*," which appeared in 1715, and were to serve as a compendium for the use of this seminary. All were astonished at the learning, sound judgment, and clearness of the author at twenty-four years.

Even in this work, Gesner's tendency to *polymathia* showed itself; for it contains many of the outlines of his later "*Isagoge in Eruditionem Universalem*."

He fully discussed instruction in the ancient languages. It would be imagined that an experienced educator was speaking, upon hearing the acute rules which he sometimes gives for teachers.

In his remarks upon instruction in Hebrew and the modern languages, he gives evidence of his studies at Ansbach and Jena.

* Materials.—1. "J. A. Ernesti Narratio de J. M. Gesner ad D. Ruhnkenium." 2. Gesner's Works; viz., "*Institutiones rei Scholasticæ*," Jena, 1715; "*Minor German Works*," Oettingen, 1756; "*Opuscula Minora*," Breslau, 1743; "*Primo Linæ Isagoges in Eruditionem Universalem. Accedunt prælectiones per J. N. Nieles*," 2 vols; Leipzig, 1774.

He then passes to other studies, recommending especially the pure and mixed mathematics.

He did not, however, confine himself entirely to instruction, but considered all that lies within the province of pedagogy. Thus, he fully discusses the requisites of a teacher; not only as to knowledge and gifts for teaching, but also moral character. He further describes the scholar, and gives directions for examining, guiding, and managing him.

In short, this little book, for that time, completely fulfilled its purpose, as the compendium of pedagogical lectures at the university; and we can only wish for a similar work, equally as good, in our own times.

One design of the "*Institutiones*," however, failed; Gesner himself, that is, did not get the appointment of lecturer upon them at Jena; for he was shortly afterward invited to Weimar, as corrector and librarian. During his thirteen years' stay in this place, he was all the time increasing the universality of his knowledge by the most comprehensive studies, a work in which his place as librarian was of the greatest service to him. He was thus well fitted to be afterward of essential service to one of the greatest European libraries, that at Göttingen, and to facilitate its first youthful progress. From Weimar he went, in 1728, to Ansbach, as rector of the gymnasium there, and then again, in 1730, he became rector of the celebrated Thomas School, at Leipzig. This he found in a very low condition, both in respect to studies and discipline.

Jacob Thomasius* was rector of this school from 1676 to 1684. At the latter period,† he was opposed to the reading of the ancient classics in the school, and at last came out in a distinct hostility against them. Accordingly he almost entirely banished them from the school, and put in their place the reading-books and chrestomathies of modern Latinists; such as Muret, Buchanan's "*Psalterium*," Schoenæus' "*Terentius Christianus*," &c. Johann Heinrich Ernesti, who succeeded Thomasius and was rector for forty-five years, from 1684 to 1729, did not discontinue this practice. When Gesner came into Ernesti's place, and found that scarcely one or two classics were read in the school, he suspected the wisdom of the rule. He had previously distinctly defended the reading of the classics, excluding only those which taught openly godlessness and sin. On this point he had no scruples in Leipzig; but he considered whether such scholars as commonly learn Latin, only to understand their professional

* Father of the celebrated Christian Thomasius.

† "The Thomas School, at Leipzig. A centennial, by G. Stallbaum, Ph. D., and rector of the school. 1839."

text-books, should not read those text-books at once; the theological students the symbolic books and Hutterus; the jurists the "*Institutiones*," &c. But in a man of so thoroughly classical an education, an error so truly unnatural to him* could prevail only for a moment, in regard to the nobler studies of youth. He soon bethought himself, and introduced anew a study of the classics. Gesner at the same time made provision for a suitable pursuit of real studies, especially of mathematics; which were taught, from 1731, by Johann Heinrich Winkler, well known as a natural philosopher.

The Thomas School was celebrated for its long-established music department, which was at one time under the management of the most skillful masters, such as Sethus Calvisius, Hermann Schein, and Kühnau. The most distinguished of all its masters, however, was that one whom Gesner found in the place at his entrance into the school; namely, the immortal cantor, Johann Sebastian Bach, for whom he entertained a great respect.†

I have mentioned that, at Gesner's coming to Leipzig, he found not only the classic studies, but the discipline, of the Thomas School, in the lowest state. There was among the pupils an universal and disgraceful indolence. They had one habit in particular, of pretending to be sick, in order to get the better diet which was provided for sickness, and to have vacations for months together. The medicines which were given them, they threw away. Thus the expenditures for medicine and the care of the sick increased, until it might have been believed that the institution was not a school, but a hospital. Gesner put an end to this practice in this way: When the scholar told him he was sick, he visited him at once, inquired in a friendly way what he wanted, and said: "It does not yet appear clearly what the disease is; until it does, you must eat only the simplest food, and stay in bed." A watcher was then appointed for the sick man, to see that he complied strictly with this direction. By far the greater part of them, quite restored by fasting and weariness, recovered in one or two days; and over the few who were really sick, and who were obliged to remain so, Gesner exercised fatherly care.

In 1733, there appeared the "*Laws of the Thomas School*," drawn up by him, which related mostly to the discipline of the scholars. "It is incredible," says Ernesti, "how useful Gesner was to the school; not merely by organizing a better administration, and fixing it fast and steadily by the new laws, but by teaching in a manner then new

* Later educators could be named, to whom this error was natural—and is now.

† In a note upon Quintilian, 1, 12, 3. Gesner says: "I believe the greatest admirer of antiquity would confess that many Orpheuses and twenty Arions are all included in Bach alone, and in any one else like him, if there be any such."

to us, and exceedingly beautiful." * In the next year, 1734, Gesner left Leipzig, having received an invitation to the new university at Göttingen. He was there professor of eloquence and poetry, and also librarian. He was also made director of the philological seminary, and inspector of all the Hanoverian schools; two important pedagogical offices, for which the experience which he had gathered in his three rectorates had well fitted him. The views which, under the influence of Buddeus, he had advanced in Jena, in 1715, he now, twenty-three years afterward, in 1738, introduced in the seminary of Göttingen. This was intended for giving to young theologians a theoretical and practical training for the business of teaching. For his lectures upon the whole of pedagogy, he took, as a basis, his "*Institutiones rei Scholasticæ*." Besides their philological studies, the pupils of the seminary studied also pure and mixed mathematics, natural sciences, and geography. They practiced teaching in the city school of Göttingen. The most important of Gesner's lectures are in his "*Isagoge in Eruditionem Universalem*," a scientific encyclopedia. We have these lectures in the form in which they were written down by a learned hearer, Niclas. When Niclas laid his manuscript before Gesner, the latter said: "I recognize myself in them; print them."

In 1740, a German society was formed in Göttingen, of which Gesner was chosen president. Afterward, in 1751, was founded the Göttingen society of sciences; at the head of the historical and philological section of which Gesner was placed. He afterward became president of the society.

Notwithstanding the many offices which required so much of his activity, he wrote works extraordinary in number and value. Two of them I have already mentioned. To these must be added many excellent editions of the classics; as, for instance, Livy, Quintilian, Horace, the writers on agriculture, &c., and also his celebrated "*Thesaurus*."† Many of his single Latin treatises, inscriptions, addresses, prefaces, &c., have been published, under the title "*Gesneri Opuscula Minora*," besides a similar collection of German compositions, called "*Gesner's Minor German Works*."

In the "*Isagoge*," and in these collected Latin and German writings, is to be found a treasure of pedagogical experience and opinions. "May these instructions," says Gesner, in the preface to his German writings, "based upon an experience of more than forty years, and the often repeated consideration of them, have a good influence upon

* Ernesti's opinion is the more important, as he was Gesner's successor in the rectorate of the school.

† Ernesti calls the "*Thesaurus*" "a very great and most laborious and erudite work, sufficient alone to secure the immortality and perennial glory of his name."

practical teaching." The teaching and learning of the ancient languages continues to have an especial attraction for him, as earlier, when he wrote the *"Institutiones."* In this department his views were entirely opposed to the usual ones, especially in regard to the grammars used in schools. "These were originally," he says,* "intended for facilitating the study of languages; but, latterly, very learned grammars have appeared, which are as unfit for teaching the rudiments of grammar, as the most subtly and skillfully made lancet, for cutting bread." "Children," he says further, "should not be martyred with the unintelligent learning by rote of rules and exceptions, and thus be made to lose the taste for study, in the beginning, and perhaps forever." Languages were made before grammar; men spoke correctly before they thought of the art of speaking. Also, he says, "It is a hundred times easier to learn a language by use and practice, without the grammar, than from the grammar, without use and practice." "The latter is absolutely impossible." In particular, it is not necessary to make the boys learn Latin rules for the gender of words, &c.; it is better for them to learn a phrase or a sentence, in which the rule appears. For our knowledge every where proceeds, not from general abstract rules, but from single examples.

He then speaks against the general overvaluation of grammatical knowledge. "It is among the most common faults of Latin instruction," he says, "to reprove harshly, to punish or to ridicule, for any fault in the scholar's grammar, as if he had sinned against the laws of God and man."† "Moreover," he continues, "those who need to understand Latin, in order that they may be enabled to read books in it, are very seldom in a position to need a grammatical oracle; and even there would be twenty or thirty to one, who would be in need of the ability to write, and particularly to write in an accurate manner.‡ These views of Gesner were so entirely opposite to those of the day, that he was attacked on account of them from many directions, but mostly under a misunderstanding. "I reject grammar," he replied to his opponents, "only for youth, as hurting them more than helping them. But, for grown persons, it is in the highest degree necessary."

Here we must mention Gesner's valuable preface to his edition of Livy, in which he speaks of the two different methods of reading the

* See his German Works, p. 256. And see p. 296, for a description of the bad methods of teaching language which were usual in the schools.

† In like manner he says (*"Institut.,"* 81,) "It would have been better to speak barbarously, and think piously, than to express an evil mind even in the most elegant words. With this sentiment, Augustine agrees entirely. See his *"Confessions,"* 1, 18.

‡ Gesner discusses the question for what, and to what extent, a knowledge of Latin is necessary, in the *"Leagoge,"* 1, 114, &c.

classics; the rapid, and the slow.* Here, likewise, he sets himself in opposition to the usual customs of the schools. He admits, it is true, that it is a good method to read, in the beginning, some book of a reasonable size, or at least some part of it, very thoroughly, for the sake both of obtaining certainty of knowledge, and also so as to learn, as it were by example, what is a thorough understanding of the classics. But he goes on to declare himself most distinctly against the entire dominion of the method of slow reading in the schools, which has become degenerated, because in the course of the explanation of one author, the most heterogeneous things are lugged in. Thus, pupils sometimes read for years together in one book of Cicero's Letters, or the "*De Officiis*," divide one play of Terence, or one book of Cæsar, into so many little parts that even an extraordinary memory can not retain them all.

After this he goes on to describe and recommend the more rapid method, that of reading in course; in which the scholar endeavors, with his whole soul and individual attention, to fix in his mind whatever author he is reading, and to understand him only, and enjoy his beauties. He relates that, when he has read Terence in this manner to his scholars, they have sat with open mouths, silent, with eyes, ears, and minds occupied, laughing even, and thus betraying their pleasure by their gestures. But when he read the *Phœnissæ* of Euripides in the slow way, with the same scholars, they sat, it is true, with open mouths, but it was because they were silently gaping or sleeping.

Gesner, as we have said, was among the first who undertook earnestly to bring to pass the adaptation of the gymnasiums not only to such scholars as were to pursue a learned occupation, but for those who were not, also; and thus, that in them real studies should be more practiced.

While he was thus laboring, earnestly, wisely, and practically, for the improvement of schools, he had also at heart, during the twenty-seven years of his professorship, the good of the university. This appears in the academical prospectuses, which, as professor of eloquence, it was his business to write. It will appear from them, he says, "How strenuously it has been endeavored to keep in order the youth of the university, who have a good title to a noble freedom, by means not having the shape of strict laws, which belong to the common unreasoning crowd, but that of a fatherly and friendly

* This edition of Livy appeared in Leipzig, in 1735. The preface is reprinted in the "*Opuscula*," 7, 239.

Ernesti entirely agrees with Gesner on the point in question, and says that he followed his method in explaining the classics in the Thomas School.

address, and thus to preserve them from the dangers into which so many fall by a misuse of freedom." He expresses himself in a clear and noble manner in "Considerations upon the friends of students;" "All teachers in the higher institutions of learning are, by their station and duty, the intended and, as it were, the born friends of the students;" and it is their duty to seek the good of the students, without regard to their own profit. For this reason, those who do not conceal the faults of the students, must expose themselves to the danger of awakening displeasure by their admonitions. He prays God "to keep the fathers of the university in this, the only right state of feeling toward those intrusted to them," and to preserve the university free from "harmful students'-friends," and "hypocrites."

There are indications in the "*Isagoge*," of the frequency and plainness with which he attacked his hearers in his lectures. He there complains, for example, that while the sciences have increased, the students have lost in industry. When he studied in Jena, lectures were given as early as five in the morning; while later, the professor set the hour at seven, and even then got scarcely a hearer. "Formerly," he says, "the students listened to lectures all the day, now they spend two hours over their coffee; while the *friseur* is coming, the curling-tongs are heating, and the hair frizzling, hours pass away. To study after four or five in the evening is thought by many a degrading requisition." In the programme for the summer lectures for 1743, Gesner recommends very earnestly to the students a persevering attendance upon the lectures. The more skillful the teacher, he says, the more close the connection of lectures, so that by as much as the latter are based upon the former, and they all constitute one whole, so much the more injurious is frequent absence to the student. And again, he advises his hearers to be attentive during their lectures, as this stimulates and increases the zeal of the teacher. "If there be any thing pleasant in my books," says Martial, "my hearers have occasioned it." This is owing to the happy influence of men's minds upon each other; and in like manner a bad influence is exerted. "One gaper," he continues, "makes the rest gape. Nothing is more wearisome than to instruct, when most of the hearers are sleepy. Quintilian says, 'as it is the duty of the teacher to teach, so it is of the scholar to be desirous of learning.'"

We have seen that Gesner sought and followed new methods for schools; it should be also mentioned that he opposed an academical custom; that of the use of Latin in the lectures. Let us now pass to other points of distinction between him and most of the philological pedagogues of his age.

The chief of them is this; that he repeatedly recommended real studies. Studies in languages, he said, should never be disjoined from those in things. This separation of things, which are by their nature intimately joined together, is a real evil. By reason of it, youth learn so many names, without one idea of the things which are named. For the purpose of elementary instruction, such books should be used as will furnish also real knowledge. He liked, accordingly, the works of Comenius, especially the "*Orbis Pictus*." As president of the German society of Göttingen, a place which would scarcely have been offered to any other philologist of his times, he esteemed those schools fortunate whose instructors, by sympathy with that society, have acquired "a love for the mother tongue, neglected in so many ways, and the ability to express themselves well in it." This facility is to be attained, not by rules, but by making translations from the masterpieces of the ancient classics.

Among real studies, Gesner gave a high place to the natural sciences, in which such great advances have been made of late years. He himself, while rector in the Thomas School, attended the lectures of Hausen, upon experimental physics. The boys, he says, ought certainly to study drawing; and we have seen how high a value he set upon mathematical studies, especially astronomy. "God," he says, "has so connected them with the heavens, that it is only by the observation of them that we can see where and at what time we are living." He recognizes geography as the vestibule, basis, and light of history, especially of that of the mother country.

Gesner thus showed himself to be a man who united, with the most thorough knowledge and love of antiquity, a correct appreciation of real studies; and who sought new methods of teaching, when he was convinced of the faults of the old. No one can imagine that for this reason he is to be classed with Basedow. In addition, I may here give one extract from the "*Isagoge*," which shows clearly how he differed from most of the reformers of the eighteenth century in his most fundamental plans. He says: "The beginnings of all sciences must be believed.* This is a very important rule, especially at the present day, when even little children are, from an early age, instructed by their teachers to believe nothing. As soon as they begin to show one spark of understanding, and wisdom, they are spoken to of opinions. And since we are by nature only too much inclined to see every thing for ourselves, and to receive nothing by simple belief, but to wish to discover the truth for ourselves, the boys

* In another place he quotes Aristotle's remark, that "it is necessary to believe what is learned."

too soon get the idea that that only is true which we understand from our natural senses; and this has the evil consequence that they are willing to believe nothing, will not learn what is necessary, and are unwilling to obey their teachers. Man can not by himself gain the first elements of learning; he must receive them from others, and what they teach him he must believe. If the boy should begin to dispute about why one letter is called A and another B, and especially if he demands reasons for it, he could ask questions for years without learning any thing; and, moreover, it would not be possible to answer him. Very often no account can be given of the first elements of things. For instance, let a pupil ask, why are such and such things called point, line, surface? And let him take nothing by belief until the reason of it is given, and he will learn nothing to eternity. I know this by experience. I have often seen, in good families, boys so precocious as to ask questions all day. But the German proverb was true of them—that a fool can ask a thousand times more questions than a wise man can answer. I do not mean by this that the utterances of the teacher are to be considered as oracles, from whose sayings there is to be no variation; but only this, that as long as we are pupils, we must take things by belief. Afterward only, when our understanding is ripened, and we have become independent, may we prove what we have learned.”

In Gesner we have thus become acquainted with a man distinguished for thorough learning, clear understanding, pedagogical wisdom, and gifts for teaching; and unweariedly active and conscientious in his official duties. Ernesti, who lived in close connection with him for many years, describes him as exceedingly religious, resigned to the will of God, and thus of like demeanor both in good and evil days, and as a loving father and friend. After a long and active life, his end drew near. When the physicians announced to him his approaching death, he answered: “What is to be settled between me and God, I have not put off to this time.” He departed in a peaceful and Christian manner, August 3rd, 1761.

JOHANN AUGUST ERNESTI.

[Translated from the German of Von Raumer, for the American Journal of Education.]

JOHANN AUGUST ERNESTI was born in 1707, at Tennstädt, a small town of Thuringia, where his father was pastor. He received his first instruction in the school of Tennstädt, and, in his sixteenth year, he was placed in the princes' school of Schulpforte. Here he distinguished himself by his important acquisitions, especially in Greek.

In his twentieth year he entered the University of Wittemberg, where Wolf's philosophy was in the height of fashion; and afterward went to Leipzig, where he attended the lectures of Gottsched on German eloquence, and of Hausen upon mathematics.

When twenty-three, he was, upon the recommendation of Gesner, employed as private tutor, by Counselor of Appeals Stiglitz, the same to whom the epistle upon the study of the ancients, prefixed to his edition of Cicero, is addressed. Stiglitz was superior (*antistes*) of the Thomas School; it was by his influence that Gesner had been appointed rector, and it was he also who procured the appointment of Ernesti, when only twenty-four, as conrector, and afterward, at the departure of Gesner, in 1734, as rector. Ernesti, at the same time, read lectures at the university, upon polite learning. At a subsequent period, he gave up his rectorship, and devoted his whole time to the university, giving his attention especially to theology.

He died in 1781, at Leipzig, aged seventy-four.

From Ernesti's own expressions, he would seem to have taken Gesner for his model in teaching. The latter induced him to publish, in 1734, the "*Initia Doctrinæ Solidioris*," a work which passed through repeated editions, and was brought into use as a school-book in various countries, as Saxony and Hanover, for instance. In this book, Ernesti aimed to give his instructions in as good Latin as possible; although, as appears by comparing the earlier and later editions,* he continued to labor for the improvement of its style, and to approach nearer and nearer to his ideal of Ciceronian Latin. In the preface, he relates that, as a preparatory discipline for this work, he read the best Latin writers of the golden age, and, where this would not serve,

* The very first period of the book will serve as an example. In the edition of 1734, it reads, "*Cum ad libellum hunc scribendum adjiceremus animum, facile prævidebamus, fore ut hoc consilium nostrum in multas multorum reprehensiones incurreret.*" Instead of *facile prævidebamus*, the edition of 1760 has *non parum suspicabamur*.

those of the silver age, repeatedly over. Thus, he says, he believes that he has succeeded in not admitting any thing into his book which was not heard in ancient Latium.* Only from necessity has he here and there used an unclassical expression.

From this saying of *Nihil veteri Latio inauditum*, it might naturally be concluded that the book would contain nothing which had not been heard in ancient Latium. And this conclusion would be, for the greater part of the book, correct. It treats, first, of arithmetic and geometry; then come the elements of philosophy, in this order: 1st, metaphysics, psychology, ontology, natural theology; 2nd, dialectics; 3rd, natural law, and ethics; 4th, politics; 5th, physics. In conclusion, come the elements of rhetoric. This table of contents reminds us of the cyclus of Melancthon's text-books; of his dialectics, rhetoric, physics, psychology, and ethics. All acquainted with the subject will readily believe that Ernesti's book would not be adapted to our present gymnasiums. The mathematical part may appear to us scanty; but when we consider that, by the Prussian school ordinances of the year 1735, one year after the appearance of the "*Initia*," no knowledge of mathematics whatever was required of those graduating from the gymnasiums, we shall retract that opinion.

Philosophical subjects are handled at length in about four hundred and fifty pages. The fact that Christianity is here completely ignored, while, nevertheless, so many things must come up which have been known to the pupils by means of their catechetical studies, must be set down as an entire error. If, according to Picus of Mirandola, philosophy seeks truth, theology finds it, and religion possesses it, it could not but be strange, to such as had possessed it from an early age, to be set to searching for that of which they were already in possession. It would be quite otherwise if the manual should contain a comparative description of the Greek and Roman theology by the side of the Christian, although gymnasium pupils are not old enough even for such a treatise.

It is quite mysterious how Ernesti should have inserted in his school-book such chapters as this: *De conjugii felicitate consequenda*, and *De cura subolis*. Of this latter chapter we must say a little more. In it Ernesti expresses views upon education, which agree in part with the earlier ones of Locke, and in part with the later ones of Rousseau. He discusses procreation, and the management of pregnant women; urges that the mother should herself nurse her children, and not give them into the charge of untrustworthy nurses; and he

* Still, Ernesti by no means belonged to those philologists who read the ancients only with the design of patching together a Latin style, by picking scraps out of them. Against that kind of reading he declared himself most decidedly, in his letter to Stiglitz.

refers to Gellius, for the like advice. Mothers, he says further, must not give their own children to nurses, but must themselves educate them; and, if they do this, they will be beloved by the children. If parents command or forbid any thing, they should give the reasons for it; for otherwise they are obeyed unwillingly, and would rather be led than driven. Parents should not require their children to be free from faults, and should not be alternately forgiving and unreasonably strict. Instruction should be such, not that the children shall believe blindly in any thing, but only in what is given them as the foundation of their belief; and they should make inquiries for the reasons of things. Thus they will be kept from credulity, superstition, and prejudices. Care should also be taken, not to fill their memories, like those of parrots, with empty or unintelligible words.

Ernesti recommends care in the choice of teachers, and in determining upon the future occupation of the children. They should early be taught a love of true honor, the right use of money, and truthfulness.

Such pedagogical rules as these would hardly be expected from the strict philologist of the old school. It is certain that the profound, universally learned Gesner, who had pursued freely so many lines of investigation, had the greatest influence upon Ernesti in this respect. What I have given from the writings of both these men, will be sufficient to show the reader what they were, and that although in general philologists of conservative character, yet they were not blind to the faults of antiquity, and sought and followed new ways; and, therefore, that they are entitled to a place between the adherents of the old pedagogy and the new. They can be compared only to Trotzendorf and Sturm on the one side, and to Locke and Rousseau on the other.



A. A. P. Garrison

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971).

Moreover, while the results of the parallel education system have been effective in reducing the wage premium, the wage differential has not been completely eliminated. With only a limited education status, students are not in this concept's category. Therefore, the results are not ideal.

the evidence of the other persons who were present at the time of the shooting, and the fact that the defendant was not a member of the group, the jury was instructed that the defendant was not guilty of the crime.

There is a great deal of evidence to suggest that the use of the word "and" in the sentence "I am a doctor and I am a nurse" is not a conjunction, but a copula. This is because the word "and" is used to connect two nouns, "doctor" and "nurse", which are both referring to the same person. In this case, "and" is used to indicate that the person is both a doctor and a nurse, rather than being a doctor and a nurse at the same time. This is a common use of the word "and" in English, and it is often used to connect two nouns that are both referring to the same person or thing.

1. The first group of people who are interested in the study of the history of the United States are the people who are interested in the history of the United States.

Booky, M. (1995). *Settling in: How to make your new school home*. New York: Teachers College Press.

one of the most important components of the theory of the firm, we will review some of the models which have been developed in this area.

This journal was brought out by the following:

[illegible]

the family settled at York, Virginia, in 1790.

Using the definition of $\mathcal{P}_\alpha$ and $\mathcal{P}_\beta$ we have $\mathcal{P}_\alpha \cap \mathcal{P}_\beta = \mathcal{P}_{\alpha \wedge \beta}$ and $\mathcal{P}_\alpha \cup \mathcal{P}_\beta = \mathcal{P}_{\alpha \vee \beta}$.

George, his brother, who was charged with the murder of the victim.

was also the case of General F. C. L. P. (1900-1901), the first of the American-born Generals to be promoted to the rank of Major-General.

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A. V. G. G. G.

VIII. FREDERICK A. P. BARNARD.

FREDERICK AUGUSTUS PORTER BARNARD, president of the University of Mississippi, whose reputation as a practical educator entitles him, pre-eminently, to a notice in these pages; and who, as a writer on subjects connected with collegiate education, stands second to no other in this country, was born in the year 1809, in the town of Sheffield, Berkshire county, Massachusetts. His father, Robert Porter Barnard, a counselor at law, highly respected in his profession, and held in honor by all who knew him, for his distinguished moral worth, was an influential citizen of his native county, which he several times represented in the senate of the state. The subject of this notice is sixth in lineal descent from Francis Barnard, of Essex, England, who emigrated to this country about the year 1638, and was one of the first settlers of Hartford, Connecticut; but removed to Hadley, Massachusetts, in 1654. In the dangers to which the early colonists of New England were exposed, this family fully participated. One of the sons of Francis Barnard was killed, early in life, at the battle with the natives which, in 1675, gave its name to Bloody Brook, in Deerfield. Another, Joseph Barnard, from whom our subject is descended, was mortally wounded, in 1695, by a shot from a savage lying in ambush, who fired upon him as he was passing peaceably along, upon his proper business, through the forest. A third son, Rev. Thomas Barnard (mentioned third in order, but the eldest of the family,) settled at Andover; and from him are descended many of the name or blood, who reside in the eastern part of Massachusetts, among whom may be mentioned Rev. John Barnard, of Marblehead.

Through his mother, who was the daughter of Dr. Joshua Porter, of Salisbury, Connecticut, later in life of Saratoga Springs, and who was also the niece of General Peter B. Porter and Hon. Augustus Porter, of Niagara Falls, President Barnard traces his lineage directly, through six intermediate generations, to Roger Williams, of Massachusetts and Rhode Island, the early champion of religious liberty in this country; some of whose traits of character, particularly his firmness of purpose, strength of will, and fearless obedience to the dictates of conscience, whether by inheritance or otherwise, he certainly possesses.

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The subject of our notice is indebted, for his earliest mental culture, to maternal solicitude. As a child, he attended the common school of his district, and had his place assigned him in classes in reading and spelling; but the tasks presenting no difficulty, because already familiar, through his mother's teachings, he found school indescribably irksome; and he has been often heard to speak of the childish perplexity with which he was then accustomed to regard his companions, while they were engaged in what they called *studying their lessons*.

He was, however, soon put to tasks which made him study. Before the end of his eighth year he was tolerably versed in elementary geography; and he had, with painful labor, and to his great disgust, been compelled to learn by rote all "the large print," with a good many qualifying "observations," and "exceptions," and "remarks," in less conspicuous type, in Lindley Murray's Grammar. It is perhaps quite unnecessary to mention that, of all this verbal erudition, he did not understand a single word; but that, as he never forgot any part of it, the meaning it was intended to embody was gradually revealed to him, as he acquired the ideas themselves, through other processes, later in life. After completing grammar, he was put into "parsing," in which exercise he was told that he would find his previous attainments very helpful. The force of this suggestion, however, did not come home to him very strongly; and he learned to parse by a process entirely inductive—by listening to older pupils, and by reading the "parsing lessons" placed at the end of Murray; the only part of the book from which he derived any benefit. He thus, by attention and comparison, became able to distinguish a noun from a verb, without troubling himself to apply the severe test of the definition, that "a noun is the name of any thing that exists, or of which we have any notion," or that "a verb is a word which signifies to be, to do, or to suffer."

Early in his eighth year he was advanced to the study of Latin. This part of his education was commenced under the private tuition of Rev. James Bradford, the minister of the Congregational church in his native town, whom he has ever held in grateful remembrance. The Latin grammar proved to be not in the slightest degree more intelligible to the learner than the English had been; but its contents pretty nearly from cover to cover were transferred to his memory, by the mechanical process which had already been made so painfully familiar; and they have there remained stereotyped throughout life, owing their ultimate intelligibility, as in the former case, to knowledge subsequently and otherwise acquired. It can not be questioned,

however, that this rote process has some advantages. The forms of declension and conjugation, the tabulated connectives, and the irregularities of a language, are, by means of it, indelibly impressed upon the mind; and they thus very much lighten the learner's subsequent labor. But to a child, the process is unpalatable to the last degree; and its tendency is to produce generally a dislike to books.

The subject of our notice, however, was, from his earliest years, very fond of books, when permitted to choose them for himself. The "*Tales for Children*" of Miss Edgeworth, and others, were early devoured. The school reading-books, except the dryer and didactic parts, were read and re-read. The "*Columbian Orator*" was a great favorite. The tastes thus acquired soon demanded superior aliment. Voyages and travels, history and dramatic writings, were sought after with avidity. One of the earliest books read, and long remembered for the delight it afforded, was Professor Silliman's narrative of his travels in England, Holland, and Scotland. It awakened the strongest desire to know the author—a desire which, to the young reader's satisfaction, was gratified later in life. A great part of Rollin's "*History*," and all of Shakspeare's "*Comedies*," and most of his "*Tragedies*," had been mastered before the age of twelve. The latter had been read again and again.

In the meantime, however, Latin was a weariness to both the flesh and the spirit; but it continued to be inculcated, and Greek also, for several years; the learner having been placed at school, first in the village of Saratoga Springs, and afterward at Stockbridge, in his native county. At the former place, however, he found something more attractive than Latin; having then, for the first time, enjoyed the opportunity of visiting a printing office. So strong a fascination for him hung about that spot, that he could not be prevented from devoting all the hours of his freedom from school, morning, noon, and night, and, above all, the "Saturday afternoons," so highly prized by school boys, for many months, to acquiring a practical knowledge of the magic art in his own person; and so expert a printer did he then become, that he has often, in his later life, lent an efficient hand, in emergencies, in offices with which he has had a connection, as author or editor.

In 1824, he entered Yale College, as a member of the freshman class; being the youngest member of a class long after noted for the weight of talent it embraced, and known as the mathematical class. Up to this time, he had given no attention to mathematical studies, beyond the elementary rules of arithmetic. It very early became manifest that a warm competition was to exist in the class, for the

first position in scholarship in mathematical science, and, for a time, young Barnard, excessively diffident in disposition, and as yet quite small in person, shrank from thrusting himself forward, when he was conscious that he lacked only self-possession to enable him to do so successfully. Knotty points were often thrown out to the whole class at once, any one being at liberty to rise and present solutions. It required some nerve for a boy of fifteen, to stand up and do this before forty or fifty critics and competitors, some of them of nearly twice his age. For some months, therefore, the peculiar character of his mind was not recognized; but, as he became familiarized with his new situation, and his diffidence wore off, he descended into the arena, and, from that moment, competition for the first position was at an end. From the beginning to the close of his college career, he was never, by accident or surprise, betrayed into an error before his class, on any mathematical subject; nor was he ever, for a single moment, at a loss to meet any demand made by the instructor, whether of himself individually, or of the class collectively. He never contented himself with the modes of investigation or demonstration laid down in the text-books, and rarely offered one in recitation which would be found in them. Beginning with the elements of geometry, in his freshman year, he amused himself with writing out novel demonstrations of all propositions and problems, to the end of the course; or until they became so varied and numerous, that he could not spare the time to write them. As a matter of course, he revelled in collateral reading in the mathematics; and, after his freshman year, he had invariably read and laid aside the college text-book, long before the class had taken it up. He never read a mathematical argument more than once; but usually addressed himself immediately to the task of making another and a better. In synthetic treatises, his habit was to confine his reading to the enunciations of the points to be proved, and to work out the argument for himself before examining the mode of treatment which the author had employed. It was, at that period, practiced by the instructors, to put forth original test propositions and problems, for the purpose of stimulating emulation, and exciting competition. These were invariably solved, almost within the hour, by young Barnard, and his solutions were often the only ones offered. There prevailed, also, then, to some extent, the practice of throwing out mathematical challenges, among the students themselves. Such challenges passed occasionally between members of different classes, and young Barnard was the object of a good many such. He never failed to send back the knot untied, within less than twenty-four hours. The tutor of his class in mathematics, dur-

ing the latter portion of his course, was the late W. N. Holland, afterward professor of mathematics in Trinity College, Hartford, himself distinguished for his mathematical abilities, and for his attainments in science. Mr. Holland, in writing of Mr. Barnard, in 1837, said: "I have never known any person, except the late lamented Prof. Fisher, who seemed to have so extraordinary a natural aptitude for mathematical studies. He soon outstripped all competitors in that department, and was, at the same time, a very excellent scholar in the classics, and in English literature. After graduating with the highest honors of his class, he became one of the masters of the Latin school, in Hartford; a station which, for many years, was offered only to the best scholars from Yale College."

We have dwelt somewhat at length upon the educational history of President Barnard, because his own notions of educational theory have been mostly derived from his personal experience. In all the course of his preparation for college, he had revolted against study, because he was compelled to learn what he could not understand, for the several reasons that difficult subjects were presented, before his mind had attained sufficient maturity to receive them; because they were presented in dry, concise, and technical language, too abstract for his comprehension; and because little effort was made by his teachers to compensate him for these disadvantages, by attempting, on their own part, to throw light on the obscurity. Whatever was intelligible, even in childhood, was pleasing; whatever was unintelligible, was repulsive. History, personal narrative, the drama, was delightful; language was odious. And yet this subject was only odious, because presented prematurely, or unintelligibly; for, in his later life, Mr. Barnard has been a passionate devotee to linguistic studies, and has made himself acquainted with all the languages of Europe, except the Slavonic tongues. So soon as the subject of mathematics was presented to his mind, the clearness with which every truth stood forth in the light of demonstration, was completely fascinating, and he followed where it led, not as a task, but as a pleasure.

It is a doctrine, therefore, entertained by President Barnard, that the mind of childhood should rather be enticed than driven to the acquisition of knowledge. He further believes that the love of knowledge is so far natural, that no other excitement is needed but knowledge itself, intelligibly presented; and consequently that, in order that this condition may be secured, the subjects of knowledge, which form the substance of teaching, should be adapted to their order, and in the manner of exhibition, to the degree of maturity or development of the mind itself.

Mr. Barnard, after remaining two years at Hartford, where he published a treatise on arithmetic, which, in the words of Prof. Holland, "added much to his reputation, especially in the higher and more difficult parts," was elected to a tutorship in Yale College, being then just twenty-one years of age. This office he held but a year, having resigned it in consequence of an apprehended failure of health. During this time, however, he prepared and published an edition of Bridge's "*Conic Sections*," which has since been extensively used in American colleges, in which the work was substantially rewritten, and also considerably enlarged. It may serve to illustrate the estimation in which he was held, at the time, by Prof. Olmsted, who had been his instructor, to mention that he was engaged by that gentleman to examine, critically, the manuscript of his *Natural Philosophy*, then in preparation for the press. Another evidence of this consideration is found in the fact that Prof. Olmsted proposed to him, before his retirement, to come into an arrangement by which he might be his assistant professor, until such time as the college should be able to divide the chair, and give to Mr. Barnard the department of the mathematics—a proposition which would have been accepted, but for the cause above mentioned, compelling him to desist for a time from occupation.

While a student in college, Mr. Barnard had devoted the time given by most of his class to the study of the modern languages, to the prosecution of mathematical studies, in the higher departments of the science. Soon after his graduation, he perceived how indispensable to the scientific student is an acquaintance with some of the languages of continental Europe. He accordingly addressed himself to the study of the French, with such earnestness of purpose that in the course of a few months he had nearly dispensed with lexicons; and soon after began to read the language with the same facility as English. He afterward turned his attention to the Italian and Spanish, with similar success; and, at a later period of life, to the German, Swedish, Danish, and Dutch.

After his retirement from Yale College, Mr. Barnard became temporarily connected with the American Asylum for the Deaf and Dumb, in Hartford; and, during this period, he conducted, for a short time, the "*New England Weekly Review*," previously edited by Prentice and Whittier, successively. He did not long remain in this situation, however, having been invited to a corresponding position, in the New York Institution for the Deaf and Dumb. This institution, now occupying a rank among the first of its class in the country or in the world, had then just fallen into the hands of its present able

president, Dr. H. P. Peet; and one of the earliest and most satisfactory evidences which Mr. Peet gave of his clear-sighted sagacity, consisted in his judicious selection of his colleagues. It is believed that he will cheerfully testify not only to the activity, zeal, and success with which Mr. Barnard discharged the immediate duties of his station; but also to the ability displayed by him in assisting to bring the claims of this department of education to the favorable regard of the legislature and people of the state; and, still further, in directing the attention of the professors of the art in this country, to the scientific and psychological principles on which it rests. In the library of the institution, Mr. Barnard found a valuable collection of works, in foreign languages, on deaf-mute instruction. He gave himself to the perusal of these with avidity; and was thus led to enter upon a course of metaphysical study, and of investigation of the philosophy of language, which soon possessed for him all the fascination which the mathematics had exercised before. He published articles on the history and philosophy of the education of the deaf and dumb, in several of the higher periodicals of the day, as the "*North American Review*," the "*Christian Spectator*," and the "*Biblical Repository*;" and he prepared many able documents on the subject for the institution itself. The subject of grammar, of which the memories of his childhood were any thing but pleasing, became, at this time, so favorite with him, that he published a treatise of his own, entitled "*Analytic Grammar, with Symbolic Illustration*," in which the structure of language and the relations of the words which make connected speech, were visibly symbolified. The treatise found much favor with the philosophic, and would probably have come into general use as a school book, but for its association with a special department of education, and the impression that it was designed for learners wanting in one of the most important of the senses.

While pursuing these studies and prosecuting these labors, Mr. Barnard did not forget the favorite pursuits of previous years. Besides keeping alive his interest in mathematics, he engaged in the study of physical science, and became an assiduous observer of meteorological phenomena, including those of the aurora borealis, the zodiacal light, and shooting stars. Upon these, especially those of the first and last class, he made many observations, in concert with Mr. E. C. Herrick, the well-known meteorologist of New Haven. Some contributions of this date may be found, from him, in the "*American Journal of Science*." He also prepared and published, about this time, in the "*American Monthly Magazine*," of New York, to which he was a

contributor, a summary of the existing state of electrical science, as connected with magnetism.

In the latter part of 1837, Mr. Barnard was elected to the professorship of mathematics and natural philosophy in the University of Alabama; and, on his way, he stopped at Richmond, Virginia, to advocate, before the legislature of that state, an institution for the deaf and dumb. There he encountered Dr. S. G. Howe, of Boston, who was there on a similar errand, in behalf of the blind. It was agreed that the friends of the two measures should unite their efforts; and the result of this union was the erection of the institution now in operation at Staunton, in which instruction is given, in different departments, both to the deaf and dumb and the blind.

Mr. Barnard entered upon his duties in Alabama, in the spring of 1838. During this year, he prepared and published "*The Alabama State Almanac for 1839*," which he designed to make a vehicle of scientific information, as well as a calendar, and a register of statistical matters, and other matters of fact. The astronomical computations were by himself, unassisted; and the remaining contents, also, mainly by himself, were interesting and valuable; but the sale did not repay the very considerable expense of publishing such a work in Tuscaloosa; and it was, therefore, impossible to continue it. A literary magazine, entitled "*The Southron*," having sprung up about the same time, was mainly sustained by the contributions of Prof. Barnard, and two gentlemen, both of whom have since become pretty widely known to the country, Hon. A. B. Meek and Hon. W. R. Smith. For a number of years, also, Prof. Barnard was the unavowed editor of "*The Independent Monitor*," a weekly newspaper, printed in Tuscaloosa; and, during this time, his pen was excessively prolific, and was employed on a wide range of subjects. As an editor, his writings were marked by a cheerful vein, mingled with a constant flow of humor; and no oracle of the tripod has probably ever been more favorite in Alabama, than he. He contributed, also, occasionally, and for a time regularly, to the other weekly newspaper in Tuscaloosa, the "*Observer*."

While in Alabama, Prof. Barnard published a new arithmetic, which came, for a time, into pretty general use in that state. He also directed the construction of the astronomical observatory of the University of Alabama; but, owing to his subsequent acceptance of the chair of chemistry in the university, it did not continue to be under his management. He was frequently called upon to deliver public addresses, on occasions of interest. One of these was in commemoration of the "*Life and Public Services of Hon. W. R. King*,"

pronounced in compliance with a request tendered by the citizens of Tuscaloosa, irrespective of party. Another, which was published, and which was very flatteringly noticed, in many quarters, was an oration before the Alabama Alpha of the Phi Beta Kappa Society, upon the subject of "*Art Culture*." He also lectured repeatedly, on scientific subjects, before popular audiences, in Tuscaloosa, and elsewhere; and, on several occasions, commanded crowded audiences, in the state house, during the sessions of the legislature.

On the publication of the accounts of the photographic discovery of Daguerre, Mr. Barnard, even before the processes were disclosed, entered zealously upon a series of experiments, relating to the art; and he very early addressed a communication to the "*Journal of Science*," giving a mode of preparing plates, by the use of chlorine gas, of such sensitiveness, as to receive an instantaneous impression. Such methods were, about the same time, introduced elsewhere; but the reagent employed was different; and Mr. Dana, in acknowledging the communication, stated that it was the first account that had appeared, of the successful application of chlorine to this interesting art.

In the year 1846, a joint commission was appointed, on the part of the states of Alabama and Florida, for the purpose of settling the boundary line between their territories, which had always been in dispute. This boundary is the treaty line between Spain and the United States, which was run between the years 1796 and 1799; and should be the 31st parallel of latitude. The commissioners, on both sides, were to be assisted by astronomers and surveyors, appointed in the interest of the several states. Prof. Barnard was appointed, by Gov. Martin, as astronomer on behalf of the State of Alabama. The parties met on the banks of the Chattahoochee, at the disputed line, in November, 1846. The astronomer appointed on the part of Florida, failed to appear; and Prof. Barnard was accordingly appointed on the part of that state, also. After the necessary observations had been made at the Chattahoochee, and as far from the river as was thought necessary, the commissioners resolved to commit the entire remaining part of the examination to Prof. Barnard and his assistants, alone; and he accordingly proceeded along the line, from the Chattahoochee to the Perdido, and thence into Alabama, to the Tensaw; the monuments being found still to exist along the parallel, all the way to the Mississippi River. His report on the results of the examination, which was laid before both legislatures, had the effect to settle the controversy immediately.

In the year 1848, the chair of chemistry in the university became

vacant; and Prof. Barnard was induced to accept it. He immediately gave a great development to the system of instruction in that science, as it had been previously conducted in that institution, or rather remodeled the system entirely; introducing experimental illustration, on the most ample scale. Desirous, also, of enlarging the usefulness of the university, as well as of introducing a species of influence, favorable to the manners of the students, he invited the young ladies of the Female Institute of Tuscaloosa (there being at that time but one seminary for young ladies in that city, where there are now four, all of them flourishing,) as well as the ladies of the city, generally, to attend his lectures, at the laboratory; an invitation which caused his lecture room to be much frequented, and often to be thronged to excess.

During the period in which he held this professorship, he continued to cultivate his mathematical studies; and among other evidences which he gave of this, may be instanced a series of papers in the "*American Journal of Science*," on the subject of the Mechanical Theory of Heat, and the conditions essential to the success of engines driven by heated air.

In the fall of 1853, he was appointed a juror in the Exhibition of the World's Industry, held in New York City; but was delayed in attendance, until the jury to which he was attached had completed its labors.

In the year 1855, the British Association for the Advancement of Science extended special invitations to a limited number of the men of science of America, to attend their annual meeting, held that year in Glasgow. Mr. Barnard received the compliment of one of these invitations, but was unable to attend.

During the latter part of his connection with the University of Alabama, some of the friends of that institution set on foot a project for the remodeling of the system of instruction, in such a manner as to leave to every student the free option to select for himself the studies he would pursue. This scheme alarmed the friends of sound education in Alabama, especially when it began to appear that strenuous efforts were making, through the press, to prepossess the popular opinion in favor of the change. These, therefore, resorted to the same channel for disabusing the public mind of error, which had been employed to propagate it; and accordingly a very animated discussion occupied the columns of many of the papers of the state, for several months. In this discussion, Mr. Barnard took a very active and zealous part, in vindication of the time-honored system, which was threatened with destruction; and his articles produced a very perceptible impression

upon the conductors of the press, no less than upon public sentiment generally; and were probably more instrumental than any other, in arresting the tendency to favor the spirit of destructiveness, which was beginning to be very distinctly manifested.

In obedience to a requisition of the board of trustees of the University, communicated to the faculty in July, 1853, a committee of the faculty was appointed to report a plan of reorganization, in conformity with the views of the advocates of change. Of this committee Mr. Barnard was chairman. The committee, in conformity with instructions, reported such a plan as had been required of them; but the majority of the committee, consisting of Prof. Barnard and Prof. J. W. Pratt, presented an additional report, embodying an elaborate examination of the plan, and its emphatic condemnation. In this report, which was drawn up by Prof. Barnard, the expediency of the proposed innovation is examined in the light of the experience of those institutions which have given it a full or a partial trial; and it is shown, by an extensive collation of facts, to have resulted in practical failure, in nearly every such instance. The plan, however, is more uncompromisingly condemned, upon higher and purely philosophic grounds, drawn from a consideration of the objects of educational discipline; and the dangerous fallacy which underlies the popular objection to many collegiate studies, viz., that they are not practical, is energetically exposed. The report concludes with the citation of the written opinions of many of the ablest educators in the country, upon the point in discussion, which are shown to be, with singular unanimity, hostile to the proposed innovation.

Some passages in the report are sufficiently remarkable to deserve citation here. The following tribute to the value of classical learning, carries with it the more weight, as coming from a man whose natural tastes had inclined him almost exclusively to the cultivation of science, and whose professional pursuits might have been supposed likely to make him forgetful of the amenities or the uses of literary study:—

If the study of language generally has the value which is here claimed for it, that of the languages of ancient Rome and Greece possesses this merit in an eminent degree. In them those principles of the philosophy of speech, to which allusion has been made, and which constitute in their systematized form the science of general grammar, are more perfectly and more happily illustrated, than in any other known tongues, living or dead. And not only is it true that, as languages, they thus furnish, to the linguistic philosopher, the most interesting, as they do at the same time, to the youthful student, the most improving of all the subjects embraced in this department of knowledge; but, also, it most fortunately happens, that their literature presents the happiest examples of language in its proper use—the most unexceptionable models of historical, dramatic, poetical, metaphysical, and oratorical composition, that the world has ever seen. We have, then, in the Greek and Roman tongues, the instrument of human thought in its most perfect

form; and, in the Greek and Roman classic authors, the application and the uses of the instrument, in their most admirable and elegant illustrations. So strongly have these considerations impressed the educators—it may almost be said universally—of all modern time, that the perpetually recurring cry of the “practical men” of the entire century which precedes us—*Cui bono?* what will all this Latin and Greek do for us in the business of spinning cotton and raising potatoes?—has been of no avail whatever to dislodge the classics from our colleges, or even to unsettle the firmness of the tenure by which they maintain their prescriptive prominence there. In view of these considerations, how empty and shallow does all this revolutionary clamor appear! And of how utterly trivial importance is it, whether the student, who has experienced the inestimable benefits which spring from a thorough study of the “*Humane Letters*,” remembers, or fails to remember, through all his after life, the mere facts of knowledge which, as necessary incidentals to this training, he picked up during his student career!

After some further examination of the specific modes in which classical study benefits the learner, and after the citation of the opinions of distinguished educators on the subject, the report proceeds:—

But while thus the value of classical study, in the subjective influence it exercises upon the student, is vindicated not only by a consideration of the nature of the study itself, but also by the testimony of judicious educators every where, even of those who have consented to its optional banishment from the college curriculum, it is not difficult, after all, to disprove the assertion, so frequently and so slipperily made, that the knowledge which this species of study furnishes to the youth is without any practical use in later life. And here, in employing the words, practical use, the undersigned would not be understood to intend a use so intensely and literally and materially practical, as to manifest itself in superiority of skill in planting cotton, or unusual wisdom in managing stock; for, if a test so gross is to be applied to the attainments of the scholar in every department, many other branches of learning, besides the ancient classics, will fall under the ban. But if propriety of speech, ease, and copiousness of expression, and those various graces of conversation, which distinguish the man of letters, may be regarded as practical benefits to their possessor; if the greater respect which they enable him to command from his surrounding fellow men, is a tribute worth receiving; if the substantial addition to his influence over others, and to his power of benefiting mankind, which they bestow, be not a thing to be despised; then will the man, in whose youthful culture the ancient classics have not been overlooked, carry with him, to the latest day of his life, advantages derived from their study, which no sordid computation of dollars and cents can ever adequately represent.

And, on this point, it may finally be added that, in the present state of the world's literature, some familiarity with the classic authors of Greece and Rome is, to any man who aspires to the name of a scholar, simply a necessity. The literature of all modern Europe is inextricably interwoven with that of Greece and Rome—and our own no less than every other. We can not be literary men, and yet be ignorant of the classics. The idea is utterly preposterous; and all the attempts to decry the ancient learning, by representing it as so much “learned lumber,” and thus endeavoring to bring it into disrepute, will have no other effect than to awaken the suspicion, or establish the certainty, that their originators are no better scholars than they should be, themselves.

Is it possible, then, that the trustees of this university will deliberately resolve to award the honor of graduation, to confer the diploma, which, from the earliest history of colleges, has been recognized only as the certificate of genuine scholarship, upon men who willfully neglect that which always has been, and inevitably always must be, the first essential to the scholar? Is it possible that they will do this ruinous thing, at a time when the university is in the enjoyment of a sound and healthy prosperity, such as it never has experienced before; and such as, to all who have been familiar with the early history of other colleges, is not only satisfactory, but highly encouraging? Is it possible that they will do it, with the evidence before them of an entirely tranquil contentment pervading the whole people, in regard to the system of instruction in operation here; and in view of the fact

that the proposition for a change, published every where throughout the state, has awakened only an occasional and feeble response; while it has, at the same time, elicited from the scattered friends of sound education so numerous, and elaborate, and able vindications of the existing order of things, as to prove, beyond all question, that the sound sense of the people is satisfied with what we have, and asks for nothing better? Is it possible that they will do this, and, in doing so, substitute, in place of a tried and approved system, one which has not even the guaranty of past success to recommend it; but which is actually, in spite of all impressions heretofore existing to the contrary, unpopular at home, and which has, in point of fact, already broken down in every other institution which has attempted to borrow it? Surely this can not be.

One of the striking points made by the report is, that the University of Virginia, which is so often referred to in evidence of the popularity of the "open system" of university teaching, furnishes in its published catalogues conclusive evidence that this system, in so far as relates to under-graduate instruction, is unpopular in the State of Virginia itself. The report states that:—

The catalogue of the University of Virginia, last published (for 1853-54,) shows a total of students, belonging to Virginia, of 289.* But, as a considerable number of these are students of law and medicine, they certainly, in a comparison like this, are not to be counted. By a careful enumeration, it appears that the number of these professional students, belonging to Virginia, is 126. The students in the department of arts are, therefore, only 163. According to the United States Census for 1850, the total white population of Virginia was, in that year, 894,800. The same authority gives the total white population of Alabama, at the same time, as 426,514. According to these figures, if the University of Virginia is prosperous while the state furnishes it *one hundred and sixty-three* students of arts, ours ought to be equally so, so long as we have as many as *seventy-seven*. But the catalogue of the University of Alabama, published last November, contains the names of *ninety-eight* students of arts from Alabama; and, if we add those who were admitted after the publication of the catalogue, we shall have *one hundred and seven*. Is there any ground, then, for asserting that our numbers are feeble; or that Alabama does not patronize her own university as well as other states do theirs? Should the assertion be still adhered to, it can be established only by comparison with some state institution in which the close, instead of the open, system of instruction is maintained; and hence the whole inference, which it has been sought to derive from this fact, will fall to the ground.

In truth, the comparison just made is most disastrous to the claims of the Virginia system, as it respects its actual popularity. For, be it observed, a main reason why we are urged to adopt that system is, that the existing one is so hopelessly unpopular as to render some destructive outbreak in the legislature, or among the people, all but absolutely inevitable. Yet, unpopular as it is (if these assumptions are true,) it is manifestly, as the figures themselves show, nearly fifty per cent. more popular in Alabama, than the system of the Virginia University is in Virginia.

Further on in this report, the argument is resumed, as follows:—

The very small number of students of arts furnished by Virginia to her own university, as has already been shown earlier in this report, is evidence enough that the system has not the approbation of Virginians themselves. This fact will appear more unanswerably true, if we extend the comparison to other colleges, where the close system is severely carried out. The College of South Carolina, for instance, exhibits a list of 189 under-graduates for the collegiate year 1853-54, of whom 175 are furnished by the State of South Carolina itself. The total

* The total number of students in the University of Virginia, during the year, from all the states which furnished to it students, was much greater than this. The nature of the argument required the comparison to be confined, however, to Virginia alone.

white population of the state, according to the census of 1850, is 274,563; while that of Virginia, as already stated, is 894,800, furnishing only 163 students of arts to the State University. If South Carolina patronized her college no better than Virginia does her university (the professional schools apart,) she would send to Columbia but fifty students instead of 175. The South Carolina College is one of some standing in years. Let us take another, also maintaining rigidly the close system, which has been in operation only for a limited period—the University of Mississippi. The total number of students on the catalogue of this institution for the past year is 158; from which, subtracting all but those whose residences are in the state, and who are pursuing the regular under-graduate course, we shall have 134, upon a population of 295,718. Yet, if Mississippi were no more partial to the course of education in her university than Virginia seems to be to that which hers has adopted, she would furnish to it only fifty-three under-graduate students.

In the following table are presented the results of similar calculations for a number of colleges, whose catalogues happen to be at hand. The dates are the latest accessible, and are all recent. In the first column are placed the number of under-graduates which each state would furnish to the college belonging to it, if it furnished the same number, in proportion to population, which Virginia furnishes to her university; and in the second are placed the actual members present, as given in the several catalogues, excluding all from other states, and all who are not regular under-graduates:—

	Proportional Number.	Actual Number.
University of Virginia,.....	163.....	163
University of Alabama,.....	77.....	107
South Carolina College,.....	50.....	175
University of Mississippi,.....	53.....	134
University of Georgia,.....	95.....	107
University of North Carolina,.....	100.....	139
Yale College,.....	66.....	135
Harvard University,.....	178.....	238
Dartmouth College,.....	57.....	160

It appears to the undersigned that facts of this nature, and which admit of being multiplied to a much greater extent, combine to furnish an absolute demonstration that the system of instruction practiced at the University of Virginia is, for students not attending the professional schools, absolutely out of favor and unpopular where it is best known—in the State of Virginia itself. It appears that not one single consideration exists to encourage the belief that that system, transplanted here, would be any more favorite with the people of Alabama than it is in Virginia. It appears that, though the name has become a popular catchword among those who have urged the remodeling of our own State University, yet the reality which it represents is not at all that thing which it is evidently here supposed to be; and that its introduction with us could only lead to immediate disappointment, and ultimate dissatisfaction and disgust.

The faculty of the University of Alabama, to whom this report of the majority of their committee was read, directed it to be presented to the board of trustees. It was accordingly read before that body, at a special meeting, held toward the close of September, 1854. The board, some of the members of which had been partially committed to the view that some modification or other ought to be introduced into the plan of instruction; and being at the same time convinced of the injudiciousness of adopting the proposed radical measure of change; fell, in the end, upon a sort of compromise, by which, without touching, or in any way impairing, the system of previous years, they endeavored to throw the university more widely open than before to students who should desire to select their own studies. The

regular classes, and the four years' course, were suffered to stand, but the names of the classes were changed from freshman, sophomore, &c., to "class of the first year," "class of the second year," &c.; and the hours of recitation were so arranged as to permit a student, not a member of a regular class, to recite in such subjects as he should choose to select. Professor Barnard, though with reason abundantly satisfied with the substantial success which had crowned the exertions of himself and his associates in this severely contested struggle, yet regarded even the trivial concession which had been made to the spirit of change as an error, and predicted that its advocates would themselves be early convinced of the fact. The prediction was fully realized, even earlier than he had imagined; the university having abandoned the experiment at the end of the third year, and returned, in all particulars, to the system which existed before the change.

During the same year, 1854, the subject of college government was discussed in the public journals of Alabama, with an animation hardly less warm than that which had marked the struggle in regard to systems of instruction. Grave exceptions were taken to the disciplinary code, as it at that time stood; and suggestions were thrown out for its improvement, such as, for the most part, served only to illustrate the want of practical knowledge, on the part of the censors, of the subject which they undertook to treat. To some of these suggestions Mr. Barnard was led to reply, in a letter addressed to Hon. A. B. Meek, one of the editors of the "*Mobile Register*." Having once broken ground on the subject, however, he followed it up in a series of communications, addressed to the same gentleman, in which he undertook to show that the complaints, so often heard on the subject of collegiate discipline, ascribe the evils which exist to erroneous causes altogether, and fail to recognize the true causes, which are simply the isolation of the youthful community, its immunity from the restraints of public opinion, and its practical freedom from the ordinary operations of municipal law. He maintained, with earnest emphasis, that nearly all the vice which college associations engender, and by far the greater part of the troubles with which college government is embarrassed, grow out of our perpetuation of a system which originated in a different age, and in a different state of society, from that in which we live; which was, in its origin, surrounded by securities which we have totally discarded, and can not resume, if we would; and which compels us to profess to exercise a degree of moral restraint over young men, which we have no means to make effectual. What is called the "dormitory system" is therefore regarded by Mr. Barnard as containing in it the source of most of the evils

encountered in the management of colleges; and for these evils he sees no effectual remedy, short of the abandonment of the system itself. The practical difficulty which prevents the application of the remedy—immediately, at least—in the case of the greater part of the collegiate institutions of the country, is to be found in their location in small villages, or in positions entirely isolated, where students can not obtain accommodations, except such as the dormitories afford. The original selection of such locations, Mr. Barnard regards as an error of great magnitude. It seems to have been occasioned by a prevalent impression in regard to the freedom of such locations from temptations to idleness or vice, which he looks upon as quite illusory; but it has entailed upon the institutions themselves many disadvantages and embarrassments, which are very palpable and real.

The impression produced by these letters upon the friends of education in Alabama, and elsewhere, was such as to occasion a demand for their republication, in a more permanent form. They were therefore collected, and, with some slight revision, given to the public, in a thick pamphlet, in December, 1854.

While these matters were occupying the thoughts and the pen of Mr. Barnard, he engaged also, with much zeal, in the advocacy of projects of internal improvement, by which the rich resources of central and northern Alabama might be brought into communication with markets, and so rendered available. Upon this general subject, and upon particular schemes for connecting Tuscaloosa and the country north of it with the sea-board, he prepared and published many forcibly-argued papers; and he, at the same time, availed himself of opportunities offered by railroad conventions, and other public meetings, to address the people, in person, upon the same topics. During the summer of 1854, he also published a series of papers, in one of the daily journals of New Orleans, earnestly urging the importance of an air-line of communication, between that city and Chattanooga, Tennessee; by which the air-line chain, extending from Maine to Louisiana, would be completed. The portion of this work within the State of Alabama, is now under construction; the extension through Mississippi to New Orleans, remains to be undertaken.

In the month of September, 1854, Mr. Barnard was elected to the professorship of mathematics and natural philosophy in the University of Mississippi, at Oxford. This was an infant institution, which had been in operation only six years; having been established on the foundation of a donation of lands made in trust, by congress, to the legislature of Mississippi for the purpose, at the time of the admission of the state into the Union, in 1817. The state had sold the lands many years

ago, and had received the proceeds into the public treasury. From time to time, laws had been passed, providing for the periodical statement of the account between the treasury and the seminary fund; but these laws had been but imperfectly complied with; and, during the long period which had elapsed without any measures having been set on foot to carry out the intention of congress in making the donation, the whole subject had become so perplexed, that no one at this time (1854,) definitely knew what was the actual state of the case.

At the time of Mr. Barnard's election to his chair, the university was greatly in need of funds. Its buildings were wanting in extent of accommodations, and in arrangements convenient for experimental instruction in science. Its library was small, its apparatus imperfect and deficient, and its collections in mineralogy, geology, and natural history, extremely meager. The necessity was apparent to the board of trustees, of applying to the legislature for relief; and this was brought the more strongly to their convictions by Mr. Barnard's urgent representations of the wants of the scientific departments, and the importance of greatly enlarging the library. The trustees, therefore, at their meeting in July, 1855, appointed a committee to memorialize the legislature; and the duty of preparing the memorial was assigned to Mr. Barnard. In this document, which is carefully drawn up, and condensed as far as practicable, consistently with its design, the argument in favor of extending a liberal support to the university of the state, considered as the prime mover in the educational system, is strongly presented; and the specific defects existing in the institution at the time, and for the supply of which funds were urgently needed, are pointed out, with such explanation as to make the urgency of the case obvious. The memorial produced an impression strongly favorable; and this impression was strengthened and enforced by an oral argument, addressed to the members of both houses, in the representatives' hall, by Prof. Barnard, at the request of the trustees, during the session of the legislature. While this memorial was pending, however, the board resolved to make a thorough investigation into the condition of the seminary fund; and a committee of the body was occupied for several days, in ascertaining what balance, under the existing laws, ought to be due to it, on the books of the treasury. In these labors they were assisted by Prof. Barnard, who was indefatigable in the zeal of his co-operation, and by whom the results of the investigation, exhibiting a large balance to the credit of the fund, were finally condensed into a succinct and satisfactory statement. This statement, having been reported to the governor, by the president of the board, was thought by him

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to be of sufficient importance, to justify him in laying it before the legislature in a special message, which he accordingly did, in the month of February, 1856. The immediate consequence of all these efforts was the passage of a law, appropriating to the university \$20,000 per annum, in addition to its existing income, for five years.

With the increased means thus secured, the board proceeded to make rapid and extensive improvements in the university, showing in the various measures, which they adopted for this purpose, great consideration to the recommendations of Prof. Barnard. Within less than three years, the time which has since elapsed, they have placed the university, in regard to its internal arrangements, to its scientific collections, and to its appliances generally for furnishing the ambitious student with the largest advantages for the acquisition of knowledge, on a level with the best institutions of its class in the United States.

In the summer of 1855, Prof. Barnard was selected by the president of the American Association for the Advancement of Education, Prof. A. D. Banks, to prepare a paper on the subject of the "Improvements Practicable in American Colleges," for presentation at the annual meeting of the association, in August, of that year. This paper, which was published among the proceedings of the association, and in the *"American Journal of Education,"** received wide approval and commendation for the judiciousness of its suggestions, and was reviewed, with strong expressions of approval, in the *"Southern Quarterly Review,"* in an article, understood to be from the pen of the accomplished editor, Dr. Thornwell.

In the summer of 1856, the presidency of the university fell vacant, by the resignation of Dr. Longstreet, who had filled it successfully for seven years; and Prof. Barnard was elected to succeed him. He entered upon his new office, under circumstances of peculiar delicacy; and it was anticipated, by all who were on the ground, that his administration would have, at the outset, to contend with difficulties of no ordinary magnitude. The anticipation was verified in the amplest manner. But, in spite of sectarian feeling, excited to its utmost pitch against him, by men who sought to bring the university under denominational influence; and of the unscrupulous and untiring assaults by a notorious and infamous pretender to science, who, after his ejection from a chair in the university, sought to gratify his malignity by venting the most atrocious slanders and libels upon the personal character of Dr. Barnard; and although the systems of discipline and instruction, which it was the purpose of the new president to introduce into the university, were misapprehended by some, and misrep-

* Vol. I., p. 174.

resented by others; his plans for the improvement and development of the university have begun to bear fruit; and many of those who, through the efforts of interested persons, were once strongly prejudiced against him, and his system of university education, are now among the warmest of his admirers and supporters.

At the close of the year 1856, President Barnard delivered a lecture to the graduating class of that year, on the subject of the *Relations which exist between the education of the University and that of Common Schools*. In this lecture, which was published at the request of the class, we have a condensed statement of views which it has been the practice of the author, for many years, to inculcate constantly upon those who have received instruction at his hands, in regard to the duties which, as members of society, they owe to the great cause of education. He exhorts them never to forget the claims of the institution in which they were themselves educated, and never to relax in effort for the elevation of the university to the highest level, whether in regard to intellectual character, or to its material means of usefulness; but to remember, above all, that this usefulness is not limited to the direct agency of the institution, in imparting knowledge to the comparatively small number who resort to it, to obtain personal instruction within its walls; but is felt far more widely, and to far more beneficial purpose, through its indirect action upon the minds of the whole people; by setting in motion, and keeping in efficient operation, a system of universal education, for which it supplies the stimulus and furnishes the laboring men. He therefore earnestly desires them, while they vigorously persevere in their active support of the higher education, in the university of their native state especially, yet, by all means, to rest their support on the broad principles of universal philanthropy; and to sustain the university, because, in so doing, they contribute, more efficiently than they can do in any other way, to the education of the whole people.

The second year of President Barnard's administration, recently closed, has been one of remarkable success. His power of controlling young men has been exemplified in the good order which has prevailed, throughout the session, among the students of the university—a degree of order never previously existing there; while the grade of scholarship has also been materially elevated and improved. These results, achieved in so short a time, and in the face of so many adverse circumstances, are justly regarded by his friends, and by the literary public, as demonstrations of his peculiar fitness for the discharge of the administrative duties pertaining to his position.

During this year, President Barnard brought distinctly before the

trustees of the university, and the public, a plan which he had long cherished in his own mind, to elevate the university, in the grade of its teaching and in the character of its aims, to a level correspondent to the assumption of its name; to put it, in brief, in the way to become, just as rapidly as the educational wants of the country shall demand, an university in the European sense of the term. This plan he unfolded in a printed letter, addressed to the board of trustees, and extending to more than one hundred octavo pages.

A large edition of the letter was speedily exhausted by the calls made for it from every portion of the state, and the board of trustees, at their meeting in July last, were so impressed with the importance of the views presented in the letter, that they ordered the printing of another and larger edition, by the following resolutions:—

Whereas, In the opinion of the board of trustees, the recommendations contained in the printed letter of President Barnard, submitted at the present meeting of the board, as to changes to be made in the course of instruction in the university, the general views of which are approved, deserve a deliberate examination; therefore, be it

Resolved, That a committee of five be appointed to confer with the president, and with him to devise a plan for carrying into effect the suggestions contained in his letter; and report to the next annual meeting of this board, the course of study and organization of the several departments, best calculated to secure the object therein indicated.

Whereas, In the opinion of this board, the letter recently addressed to the board, through the press, by President Barnard, contains matter which ought to be universally diffused among the friends of education, and especially among the people of Mississippi; be it

Resolved, That one thousand copies of said letter be printed for the use of the board, and for general distribution.

The letter has attracted much attention at the hands of distinguished gentlemen throughout the country, who are themselves engaged in the work of education, and their numerous commendatory letters, addressed to its author, afford an ample and gratifying testimony in corroboration of the soundness of his views. A committee of the board of trustees has been charged with the duty of investigating and reporting upon the proposed changes advocated in the letter.

President Barnard has, all his life, possessed a great proclivity to mechanical invention. In his boyhood, he was constantly engaged in the construction of some species of mechanical contrivance, and the propensity has never disappeared. At the meeting of the American Association for the Advancement of Science, held in Baltimore, in April, 1858, he presented a description of an electric clock, constructed, according to his designs, by Ritchie, of Boston. In this very beautiful piece of mechanism, the pendulum receives its impulse from two small weights, alternately raised by magnetic power, while the pendulum itself is entirely free. So long ago as the year 1848, he

invented a printing telegraph, capable of performing with greater rapidity than any in use; each letter requiring, for its production, but a single electric impulse, instead of such a succession as is necessary in the instruments which allow all the intervening letters to escape, one by one, before that which is desired can be reached. The instrument, however, required the use of the relay magnet and local battery, which were covered by Morse's patent; and it has never, therefore, been brought into use.

In the year 1854, President Barnard was admitted to deacon's orders in the ministry of the Protestant Episcopal church, by the Rt. Rev. Bishop Cobbs, of Alabama; and, in 1855, he was ordained a presbyter in the same church, by Rt. Rev. Bishop Green, of Mississippi. On his removal to Oxford, the parish in that village naturally fell under his charge, and he has continued to hold the rectorship up to this time—preaching, ordinarily, on two Sundays in each month. How he finds the time, in the midst of so many and such engrossing avocations, for the preparation of his pulpit discourses, is a standing surprise to all who are aware of the number and extent of his various employments. As a composition, each of his sermons seems to have been as elaborately finished, as though the toil of weeks had been bestowed upon it; and yet, it is known that his sermons are actually prepared in the course of a few brief hours, during which he is often liable to interruption. His sermons display, also, a range of theological reading, whose breadth might well excite the astonishment of those who know how recently he has taken holy orders. Indeed, to listen to him in the pulpit, no one would suppose him to be a comparatively unpracticed clergyman; and all who can appreciate sincere and glowing piety, set forth and advanced with rare felicity of style, clearness of statement, force of logic, and poetic beauty of illustration, must regret that talents like his have not been exclusively devoted to the church.

It has been said of him, that the most remarkable characteristic of his mind, is his versatility. In all the various walks of letters and science which he has at different times pursued, he seems equally at home. He has evidently been "doing one thing at a time," during all his life; and has made it a rule to exhaust every subject of investigation, before he laid it aside. Whatever he has once mastered, he has retained with such a freshness of recollection that, seemingly without mental effort, he passes from subject to subject, without embarrassment, or confusion of ideas, and calmly draws forth from his mental treasures "things new and old," as the exigences of the moment may require.

The "*Letter*" which President Barnard addressed to the board of trustees of the University of Mississippi, in 1858, is so full of suggestions of the highest practical importance to the efficiency and fuller development of our American collegiate and university system, that we must enrich our pages with a few extracts.

In this, as in his former publications on the subject, the writer claims that the expansion of the range of studies, without extending the time in which these studies are to be pursued, has impaired the efficiency of the system, in its original and legitimate aim—the discipline and training of the intellectual powers—without giving to the students a thorough mastery of any one of the many new subjects introduced. This evil he attributes, not to the inefficiency of the professors, or to their defective methods of instruction, but to the system itself.

The evil has been the growth of years. It has accumulated by degrees almost imperceptible. Each successive addition has probably seemed inconsiderable to those who made it, but the united sum has become intolerable. Could it, in the nature of things, have been possible that a proposition should at any one time have been made for a sudden change from the system, as it existed a century ago, to the system of to-day, it is inconceivable that it should have been entertained by enlightened educators for a moment.

To relieve the course of under-graduate study in our colleges of some part of its excessive burthen, and at the same time to meet the demands of the age for instruction in the studies which have been introduced, President Barnard proposes to divide the studies into distinct and separate courses—a sub-graduate and a post-graduate department.

The sub-graduate course may be defined by the very simple process of excluding from the curriculum of study, as it stands at present, all those branches of science which are confessedly modern additions, and, along with these, the modern languages. This course will, therefore, as reconstructed, embrace the English, Latin, and Greek languages, all the elementary branches of the pure mathematics, the mechanical branches of natural philosophy, logic, rhetoric, the principles of criticism, moral and mental philosophy, composition, and elocution. These several branches of study are to be pursued to something like the extent, and with something like the thoroughness, contemplated in the earlier period of the history of our collegiate instruction. To these it may not be thought improper to add, during the concluding year, succinct expository courses in chemistry and the subjects of natural philosophy, not strictly mechanical; these topics being taught avowedly in outline only, and not as matters to be embraced in the examination for the Bachelor's degree.

To the post-graduate department, may be turned over those branches of science and letters which are excluded from the former, and which are confessedly, at present, but imperfectly taught; and the number of these may, from time to time, be increased, by adding new ones, as the wants of the public and the growing resources of the university may demand or justify. Thus it may immediately include astronomy, geology, mineralogy, chemistry, natural philosophy, meteorology, civil engineering, the higher branches of the pure mathematics, Greek and Roman letters, the modern languages and their literature, political economy, international law, constitutional law, and the history of philosophy; but it probably will include, at first, only such of this list as are most practical in their nature. As, in creating this department, the design should be, from the beginning, to build

up here ultimately a university in the largest acceptation of that term, it is to be expected that, in the progress of years, schools of agriculture, of natural history, of medical science, of civil and political history, &c., &c.

The post-graduate department is to be open to all who may wish to go thoroughly to the bottom of any subject which the university proposes to teach, and for which he has prepared himself in school, or by private study; but the master's degree is not to be conferred upon any one who has not graduated as Bachelor of Arts, in this or some other college. When students of mature minds resort, of their own option, to a school of higher learning, like that contemplated, it is presumed they will be in earnest in the pursuit of knowledge.

The above assumption can not safely be made of the body of the under-graduates of our colleges. Nor is it difficult to find reasons for a fact of so general observation. One of these is, doubtless, the immaturity of the youthful student himself; in consequence of which, he is yet to learn both the importance of mental culture, and the value of positive knowledge. Another is presented in the circumstance that the under-graduate student is not always, perhaps not usually, a member of an institution of learning, entirely of his own voluntary choice; but that he has become such, in compliance with the wishes of his parents and friends; often with no other feeling on his own part than a desire to make his college life pass away as agreeably as circumstances will allow; a desire which does not always prompt him to seek for enjoyment by the most rational means.

In the higher department, or post-graduate course, of the university, President Barnard proposes to employ the plan of daily recitation only to a limited extent, and to resort mainly to oral exposition on the part of the teacher.

According to Sir William Hamilton, all instruction was originally given, in the universities of England, as it continues to be in the continental universities, by lecture. The colleges and halls, which now monopolize the principal work of teaching in those venerable institutions, were erected to provide for the physical wants of the students, and to secure a vigilant supervision over their morals. The officers, called tutors, employed by the colleges for the latter purpose, gradually took upon themselves the character of instructors, by exacting from the youth under their charge, a repetition of what they had learned in the public lecture-halls. To this kind of recitation, they subsequently added recitation from books. The evident design of the exercise, in its origin, was that in which we find its chief utility at present—to insure the attention of the pupil to the subject which he is required to know. The distinctive name given by the French, to the officer whose duty it is merely to hear recitations, makes it sufficiently evident what idea is associated with the exercise by them. This name—*répétiteur*—suggests to the mind the bare repetition of a task, as that which it is the business of the officer to secure. * * *

All that Melancthon has said, all that Hamilton has said, all that any panegyrist of the system of daily examination, as a means of instruction, has said, in regard to the incidental advantages growing out of the method, is admitted without any hesitation. It stimulates emulation, it cultivates self-possession, it encourages or enforces precision of speech, it abates conceit, it convinces of deficiency. But all these resultant benefits presume the immaturity of the learner; and most of them presume, furthermore, that an unceasing constraint is necessary to compel him to profit by the instructions he receives. * * *

It will be conceded that, considered as an instructive, and not as a coercive method, the system of daily examination is attended with some incidental advantages, besides those which have just been enumerated. It is a possibility that a student, who has failed to comprehend some point embraced in the text of his lesson, may be enlightened, by listening to the performance of a fellow-student. It

is also a possibility, or rather a fact of frequent occurrence, that the imperfect performance of an individual scholar, may indicate to the instructor the deficiencies of that individual, and so elicit explanatory comments or illustrations. It is further true, that the instructor may volunteer explanations and elucidations of points of difficulty, even though occasion may not arise to force their introduction.

An acute instructor, moreover, by the ingenious selection of interrogatories, will bring out the weak points of a pupil, as a lawyer does those of a witness; or will bring into prominent relief the points of the subjects under consideration, which are of highest importance. But, beyond this, it is certainly true, that it is only in so far as, for whatever reason, the instructor does actually superadd his own teachings to the text of the lesson, that any talents or attainments, which may belong to him personally, can be of any sort of use to his pupils. For all the purposes of mere recitation, any man, who is capable of understanding what the pupil says, and of reading the book or books from which he has learned it, so as to compare the performance with the text, is as good and as capable a presiding officer and examiner in a class-room, as any other. The teacher, therefore, who meets his classes for no purpose at any time but to "hear their recitations," is not really a teacher, except in so far as he ingrafts upon this exercise the expository feature which is the distinguishing characteristic of the plan of instruction-by lecture. To do this, however, to any extent, in the recitation-room, without seriously interfering with the specific design for which the exercise of recitation was primarily instituted, is proved by experience to be impracticable. Class recitations have, at best, the great disadvantage, that either but few out of a large number can perform at all, or that each one who performs shall be under examination for so brief a space of time as nearly to defeat every useful object, and to render the exercise little better than an idle form.

Another serious vice of the system, is its pernicious influence on the teacher. To whatever degree it may be coercive to the student, it is not in the least so to him. It stimulates him to no self-improvement, and awakens in him no ambition for higher attainments, on the one hand; and it affords him no adequate field for the display of genius, or for the turning of accumulated knowledge to use, on the other. Instead of this, the opportunity which it offers him of sinking, without observation, into a mere cipher, is a real, a perpetual, and a most insidious temptation to sloth. The difficulty of employing, in the recitation room, the expository mode of instruction, without overreaching too far upon the exercise proper to the hour, is enough, in itself, to repress in the teacher the teaching spirit, and to cause him constantly to tend to the level of the mere *répétiteur*. How dangerously is this tendency increased, by the fact that its downward direction coincides precisely with that in which the native love of ease is perpetually dragging all mankind! For this great evil, there is but one antagonistic influence, which can be of any avail: it is that of a living, fervent, zeal in his work, existing in the instructor himself; a zeal, not in the work of conducting recitations, as the remark might seem to imply, but which would be ridiculous—a zeal, rather, in the higher and nobler work of training immortal minds to vigor, and capacitating them for usefulness. The college officer, therefore, of the present day, whose interest in his profession is bounded by the fact, certainly uninspiring, however important to himself, that it secures to him the means of living, is in imminent danger of lapsing into a mere automaton.

The advantages of oral teaching are thus set forth:—

According to the plan, if the teacher possesses any knowledge on the subject of study, which is not contained in the books of the course, or not easily accessible to the student, or if the sources from which such knowledge may be obtained are above the present level of the student's capacity, this knowledge will be brought out and made available. And if he possesses any power of clear analysis, or of luminous illustration; if he possesses, as he ought, in order to occupy fitly a position of this high responsibility, that mastery over his theme which belongs to the man who has ceased to think of the truth which he teaches as of a something found in books, and of which all that he knows is knowledge gathered at second-hand; but who has independently interrogated the sources of information himself, and stands in immediate contact with nature and with thought, feeling no need of an interpreter—if this is his own intellectual character, this the

degree of his intellectual cultivation, and this the comprehensive scope of his acquired resources—then his teachings will carry with them, to the minds of his hearers, a fullness of satisfaction, and fasten themselves there with a permanency of impression, such as no amount of perusal of mere lifeless text-books, written down to the level of their immediate attainments, no matter how earnestly attentive, or how conscientiously faithful the perusal may be, can ever produce.

Not that from such a system of instruction books are to be discarded. By no means. Not only will the necessity of books continue to be as absolutely imperative, as under any system whatever of recitation from a text; but the multiplication of books will be an inevitable consequence. For, while the instructor will aim to expound all that relates to theory or doctrine, he will not embarrass his classroom with the lumber of innumerable applications, which, however useful they may be, are the proper labor of the student himself, in his solitary study; neither, in regard to simple matters of plain fact, of which a multitude are strewn along the path of every walk in science, will he consider it expedient to occupy time in stating, in minute detail, what can be found in every book, and what needs but to be read once to be understood. For their necessary enlightenment in matters such as these, he will refer his pupils to certain selected authors, of which he will designate the portions which require their attention, with as much regularity as if they were to be subjected to examination upon the same passages. But he will not always confine himself to one author, nor always give the same author preference; for his business is to teach a subject, and not a book; and books, therefore, are not his guides, but his helps. Nor will the student find it quite a practicable thing to disregard the recommendations thus made, or to neglect the perusal, or rather severe study, of the books designated; for he will shortly discover that this study is indispensable to his understanding and properly profiting by the instructions of his own immediate teacher.

The two salient merits of the method of instruction here proposed, then, for the class of learners contemplated, are, first, that it both permits and compels the teacher to be a teacher, and neither constrains nor allows him to sink into inactivity, nor to content himself with presiding in empty state over an exercise to which he is conscious of contributing nothing valuable; and, secondly, that it makes *knowledge itself*, and not the substance of any *treatise* upon knowledge, not any *artificial form* into which knowledge has been thrown, the immediate subject of teaching.

To make the plan of oral teaching more effective, President Barnard proposes to introduce another feature, somewhat peculiar:—

This is to afford to the members of the class, pursuing their studies in any school, the opportunity, after the instructor shall have completed the exposition of the topic of the day, to bring up for re-examination points which still remain to them obscure, or to ask further information in regard to matters which may not have been fully explained. This is, in fact, to inaugurate a species of recitation in which the student and teacher reverse the positions usual in this exercise. The student questions; the teacher replies. The student should even be permitted, if he pleases, in cases which admit of argument, to take issue with his instructor, and to present his reasons for his opinions. Discussion will be advantageous to both parties, and will keep more actively alive the interest felt by the class in the subject of study.

But the larger portion of the "*Letter*" is devoted to an elaborate effort to induce the trustees, by inaugurating the project of a post-graduate department, to take a first decided step in the direction of a higher development of the educational system of the state.

The character of every school, from the highest to the lowest, within our borders, is to be determined ultimately by the respectability or the inferiority of the state. Though it is true that but a fraction of the people will receive their personal instruction within the university halls, yet all, without exception, will be partakers of the benefits of which the university is to be the fountain-head and the central source. If the institution does not immediately teach the entire people, it will

teach their teachers; or, what is equivalent to this, it will force every instructor, whom it does not itself instruct, to come up to the standard it prescribes, on penalty of being else driven from the educational field. * * *

But what is the university of to-day? What, but a training school for immature minds—impaired, indeed, in its usefulness for this purpose, by the very attempt to accomplish, along with it, other and entirely incompatible objects? If the people suppose that this is a place to make practical men, or learned men, or profoundly scientific men—if they suppose that it is within the reach of possibility for the university, under the existing system, to turn out accomplished engineers, or expert chemists, or proficient astronomers, or profound philosophers, or even finished scholars—we know very well that they are deceived. Not that this institution falls any further short of accomplishing these ends, or fails any more signally to meet this popular impression, than other American colleges; but that the power to do these things seems, by force of a general hallucination, to be attributed to colleges as a class, while, in point of fact, it does not actually exist in any one of the whole number. * * *

The existence of the want of institutions of a higher than merely collegiate grade, as a reality, is made evident by the earnest and urgent demand, spoken of earlier in this communication, which has been, for the last thirty or forty years, so extensively heard, for something or other which the existing educational system does not supply. This demand, so far as it has proceeded from scholars and men of science, has taken the specific form of a demand for universities called by that name; because scholars and men of science have been able to perceive distinctly, that the university was the precise thing needed to satisfy the want. But when it has come from the people—and from the people it has come very steadily, for at least a quarter of a century—it has been, not for the university by name, but for new schools of some vaguely-conceived description; for colleges to be broken up and destroyed in all that regards the province of their past usefulness, and built up anew upon some visionary plan, and according to some impracticable theory; for schools of science, as applied to the arts of construction, of agriculture, of manufactures, and every thing useful to mankind, but chiefly things useful according to that literal sense which confounds utility with increase of wealth; for schools, in short, which should do what the collegiate schools do not do, and what we know that it is not necessary or even proper that they should do—prepare men, so far as schools can prepare them, to take directly hold of the real business of life. No one is ignorant that this demand has existed for a period at least as long as asserted; that, at times, it has been vociferous and violent; or that, not content with insisting on the creation of new schools, to accomplish the ends desired, it has turned, occasionally, almost in a spirit of vindictive destructiveness, upon the old, because they did not accomplish those same ends.

These demands, the undersigned ventures to assert, are evidence of the want of higher universities. Not because they ask for the university; not because their authors, if the university were proposed to them as a remedy, would be likely to accept it; but because the present inconvenience, which is so sensibly felt, is one which the university would remove, though those who feel it do not perceive how. And why not? Because first, looking at universities, as they have been in past centuries, as the repositories of literary lore, as the resorts of scholars dealing with abstractions, as the burrowing-places of book-worms, eating out the hearts of the black-letter volumes of the sixteenth century, or of the manuscripts of the sixth, as the unchallenged domain of grammarians and lexicographers, of commentators upon Aristotle and Longinus, ingenious speculators upon the mysteries of the digamma, and indefatigable elaborators of ethical and logical niceties, they picture them, in their imaginations, even to this hour, as solemn and shadowy retreats, still smelling of the dust and mold of antiquity, where philology, linguistic philosophy, and the sublimer metaphysics brood, like the pensive owl in Gray's churchyard turret, with none to

"Molest their ancient solitary reign."

But this conception is entirely erroneous. The university, in the sense in which the name is now generally received, no matter what may have been its original acception, is *Universitas Scientiarum*; it is, in other words, an institution in which the highest learning of its day is taught in every walk of human knowledge.

When classic learning, philosophy, and logic, were subjects of the highest interest in human estimation, it is not surprising that the character of university teaching should have been principally determined by them. But, inasmuch as, at the present day, physical science has attained a position of actual dignity, immeasurably higher than it then enjoyed, and as its useful applications have become almost endlessly more numerous and varied, the university of to-day would fail to be what its name imports, if it did not assign a corresponding prominence to these subjects—subjects, be it observed, which happen to be the same for which the agitators we have been speaking of demand that a special provision of special schools shall be made. * * *

There is, however, a second class of agitators, who, while admitting the justice of the foregoing representation, are not disposed to accept the university as a remedy for the inconvenience they suffer, because, while it gives them all that they demand, it gives them at the same time much more—much for which they do not ask, and for which they do not care. They fear so great a project, as the creation of an institution, professing, and really preparing itself, to teach every thing embraced in the entire circle of human knowledge. They fear that, in attempting this, they shall attempt what is beyond their means; and that, by grasping too much, they shall lose every thing. It is believed that all this class of persons, if they rightly interpret our views, will find that we are entirely in accordance with them, and they with us. For no such visionary scheme is entertained by any one connected with this institution, as that of creating here, in a day, a university, complete in all the many-faced aspects of a repository of universal truth, and a dispenser of universal knowledge. What is aimed at, what is recommended, is only, as already stated, to take a first step in the right direction—a step which shall, indeed, ultimately conduct to the fulfillment of the great idea, but which shall not be itself the fulfillment—a step which will mark only the beginning of a progress, in which, advancing only as the growing intelligence and increasing wants of the people of the state shall urge it, the University of Mississippi may, to the eyes of a future generation, at length present the lustrous spectacle which the comprehensive idea of a true university implies.

There is still another class, whose views on the subject under consideration can not be overlooked—a class possibly the most numerous of all those who concern themselves about it; or, if not the most numerous, at any rate, by far the most impracticable. Those are here indicated who deny the utility of high learning altogether. They are, of course, utilitarians in the technical sense of that word. Let any thing tend to promote the bodily comfort of the race—let it furnish man with food, or keep him warm, or put a barrier between him and the weather—and that is a useful thing. By consequence, therefore, science does, occasionally, in some of its practical results, command their partial consideration; but, for science or learning as a whole, a matter between which and the increase of wealth no connection in the relation of cause and effect is to their minds obvious, they have no respect whatever. To elevate the intellectual man in the scale of being, to enable him to form larger and juster views than his unaided senses or his individual, casual, and unsystematic observation has qualified him to conceive, of the power and wisdom and goodness of the great Architect of the universe, to introduce him to a world of enjoyments growing out of the exercise of the godlike intellect upon subjects of beauty, and sublimity, and deep-seated and with delightfully difficult effort laboriously unraveled truth—enjoyments such as doubtless occupy cherubic intelligences, in their rapt contemplation of the wonderful works of God—all this the mere utilitarian philosopher, ever like the man with the muck-rake in Bunyan, looking downward, fails to comprehend and to appreciate; and all arguments addressed to him, founded upon the consideration, to which he is insensible, that knowledge is valuable for its own sake, are wholly thrown away.

* * * * *

Is, then, scientific knowledge useful? Few objectors will take the broad ground of denying all utility to science; or of denying utility to all sciences. Few will hesitate to admit that every science furnishes some facts that are useful. Even the patient and diligent collector of bugs, and butterflies, and caterpillars, though looked down upon in a general way by the utilitarian with an amusingly sublime loftiness of contemptuous regard, if he but intimate a belief that he is upon the sure trace of a method of exterminating the insect scourges of the cotton-field, is

listened to with respectful, nay, with greedy ears, and is elevated at once to a position of comparative dignity. No scoffer at science, therefore, ever scoffs at the science, or at the facts of science, which he understands; understands, that is to say, not as simple, isolated facts, a thing which is generally easy—but understands in all their bearings, and relations, and far-reaching affiliations with other facts with which they have no obvious or visible connection—a thing which is often not easy at all.

When Priestly, in 1774, turning the focus of his burning lens upon the substance known in the shops of the apothecaries under the name of red precipitate, detached bubbles of a gas identical with that which, in the atmosphere, supports life, who could presume that, in thus freeing one of the metals from its companion element, he had detected the composition of many of the most useful ores, and furnished a hint which was yet to reduce all metallurgic art, from the smelting of iron to the reduction of aluminium, under the dominion of chemical science, and to the severe rule of an intelligent and a productive economy? When, in the same year, Scheele, by operating on the acid of sea-salt, made first visible to human eyes that colored gas whose suffocating odor is now so well known to all the world, who could foresee the astonishing revolution which a discovery, then interesting only for its curious beauty, was destined to introduce into the manufacture of paper, of linen textures, and of a vast multitude of other objects, of daily and hourly use? Or what imagination could have been extravagant enough, or fantastic enough, in the exercise of its inventive power, to anticipate that a substance, for the moment not merely useless but seemingly noxious, would, in the nineteenth century, accomplish what, without it, no instrumentality known to science or art could have accomplished—find aliment for the rapacious maw of a letter-press, whose insatiable demands, already grown vast beyond all conception, grow yet with each succeeding year? When the chemists of the last century observed the discoloration and degradation which certain metallic salts undergo in the sunlight, who could possibly read, in a circumstance so apparently trivial, though occasionally troublesome, the intimation that the sun himself was about to place in the hands of Niepce, and Daguerre, and Talbot, a pencil, whose magical powers of delineation should cause the highest achievements of human pictorial art to seem poor and rude in the comparison? When Malus, in 1810, watching the glare of the sun's rays, reflected from the windows of the Luxembourg to his own, noticed for the first time the curious phenomena attendant on that peculiar condition of light which has since been known by the name of polarization, what prescience could have connected a fact so totally without any perceptible utility, with the manufacture of sugar in France; or have anticipated that an instrument, founded in principle on this very property, would, forty years later, effect an annual saving to the French people to the extent of hundreds of thousands of francs? When Ørsted, in 1819, observed the disturbance of the magnetic needle by the influence of a neighboring galvanic current, how wild and visionary would not that man have been pronounced to be, who should have professed to read, in an indication so slight, the grand truth that science had, that day, stretched out the scepter of her authority over a winged messenger, whose fleetness should make a laggard even of Oberon's familiar sprite, and render the velocity which could "put a girdle round the earth in forty minutes" tardy and unsatisfying?

Questions of this kind, suggested by the history of scientific progress, might be multiplied to fill a volume. Indeed, it has almost come to be a dogma in science, that there is no new truth whatever, no matter how wide a space may seem, in the hour of its discovery, to divide it from any connection with the material interests of man, which carries not within it the latent seeds of a utility, which further discovery, in the same field, will reveal and cause to germinate.

We would gladly follow President Barnard through his glowing argument, in behalf of higher learning but we must refer our readers to the "*Letter*" itself.



WALTER B. JOHNSON, 1890

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Walter R. Johnson

IX. WALTER B. JOHNSON.

WALTER ROGERS JOHNSON was born in Leominster, Mass., in 1794. His father, Luke Johnson, was a farmer of strong mind and decided character, and though but a youth at the breaking out of the Revolution, bore an active part in the struggle. His mother was only daughter of Rev. John Rodgers, first minister of Leominster, whose descent is traced in a direct line from Rev. John Rogers, the martyr of Smithfield.

Of these parents Walter was the only son, and the youngest of their three children. His mother died soon after his birth. He derived from his parents a robust physical constitution, intellectual vigor, and excellent moral endowments; and enjoyed through life, by hereditary right, the inestimable blessing of good health.

He early manifested a fondness for learning and a taste for books; and soon aspired to acquirements beyond the routine of the New England schools of the day. Of these, his assiduity soon enabled him to master the studies, and his local reputation for scholarship and manliness of character, procured him, while yet quite young, an invitation to teach a neighboring district school. While he fulfilled with punctuality the duties of his station, he lost no opportunity of making progress in his own studies, being stimulated by the prospect of securing by his own exertions the means of preparing for and pursuing the collegiate course which his father could not afford him. In 1814 he entered Groton Academy, completed his fitting for college within a year, and in 1815 entered Harvard University, as a freshman.

Here he maintained an unblemished character and a high position in his class. Continuing his earnest pursuit after knowledge, he applied himself to several studies not in the college course, including botany, chemistry, and some foreign languages. Under the necessity of supporting himself, and determined not to incur any avoidable pecuniary obligations, he spent his vacations in teaching in district schools. He graduated in Harvard in 1819, and, could he have followed his own inclination, would have remained in Cambridge to study law. He was however obliged to resolve to teach during two or three years, and accepted an

offer to become preceptor, as it was then called, of Framingham Academy.

Here he remained a year, laboring energetically in his vocation, and devoting his leisure hours to the sedulous study of law and belles lettres, at the end of which period he accepted a proposal to take charge of a small classical school in Salem, intended to prepare gentlemen's sons for college or business.

Mr. Johnson deeply appreciated and enjoyed the excellent society and rare literary advantages of his position at Salem, and he made good use of the improved opportunities which he found there for advancement in his knowledge of law, as also in science and general literature. He always considered intercourse with great minds a most powerful stimulus to his intellectual progress, and took great pleasure in his acquaintance with several eminent scientific men of Salem, including the venerable Nathaniel Bowditch. Under such influences, his predilections for the study of natural science received a new impulse, and he made large advances into its vast domains, subsequently the chief field of his labors and source of his reputation.

He was a ready writer, and a frequent contributor to the journals of the day, whose columns were always open to him. He occasionally wrote a sonnet or song, but most of his articles were of a grave and solid character. He excelled also in epistolary composition, and his letters were much valued by their recipients. His taste in literature was correct, and cultivated by study; and having a clear, sonorous, and flexible voice, and an excellent elocution, he loved oratory, and was successful in it. He was often desired to speak in public, and the anniversary of the Fourth of July especially, seldom failed to call forth from him either an oration or a poem.

Mr. Johnson had before this time become deeply interested in the cause of education, at large. It afforded, as he believed, the only sure foundation of a safe and prosperous republic; the only guarantee against poverty, crime, and anarchy. As this interest increased, he relaxed his attention to law, and bestowed more time upon an extended course of reading bearing upon the subject of education; undertaking to gather from the best works relating to it, from the time of Bacon to his own, whatever might with advantage be applied to the studies of American youth. The benefits derived from these investigations appeared in all the educational efforts of his after years, as teacher, essayist, lecturer, experimenter, and in preparation of text-books.

He remained in Salem but little more than a year, having been requested by the trustees of Germantown Academy, Penn., to become principal of that Institution, one of the most prominent in the state, originally endowed by it, and further enriched by private liberality. His acceptance of this offer was in part determined by a desire of more extended knowledge of the world ; for hitherto he had never been outside of his native state.

The site of Germantown Academy was near the main street of Germantown, upon a lane leading away from it. The locality was salubrious and agreeable, and the buildings were surrounded by play-grounds and gardens, were substantial and respectable in appearance, sufficiently capacious, and included a library, philosophical and chemical apparatus, and comfortable dwellings for the principal and boarding scholars. Evidently nothing more was needed to make the institution equal to any in the middle or northern states in excellence or celebrity, except the appreciation of a liberal and vigorous system of instruction and discipline. A short time, however, sufficed to show Mr. Johnson, just come from the comparatively strict and thorough training of New England schools, that the public mind in Pennsylvania was far behind the age in the conception of what constituted a good education, and in appreciation of its value ; and that, at least in the interior, far greater importance was attached to the development of soil and of animals, than of the minds of the young

Mr. Johnson was not long in perceiving that his principal field of labor here would be outside the walls of the Academy ; and that to accomplish anything creditable to himself, or largely beneficial to his pupils or the cause of education at large, it would be indispensable to arouse the attention, convince the reason, and secure the co-operation of the trustees of the institution, and also of parents and guardians. A prevailing laxity of parental discipline and apathy on the subject of education, were among the discouraging obstacles to be surmounted, requiring long and patient effort, and for striving with which he had little taste or inclination. But he also discovered that he could count upon the sympathy and intelligent co-operation of many liberal and cultivated persons, both in attempts to introduce special improvements and in an endeavor to establish a common school system which should be commensurate with the wealth and influence of Pennsylvania.

In view of the wide field of effort which thus opened before

him, and of the manifest increase of the influence of his own wishes respecting the management of the seminary, he yielded, after some hesitation, to the wishes of the trustees, and continued at the head of the Academy after the expiration of the year for which he at first engaged. Under his management, the reputation and prosperity of the institution increased, and its classes were well filled. His own position became at the same time more pleasant, as he became better and more extensively known. His genial disposition found much to enjoy in the refined society to which he had access in Germantown and Philadelphia; he was invited to the well known "Wistar parties;" and his fondness for literature and science found much gratification from intercourse with the many men of eminence in those departments whom he thus met. He also greatly enjoyed the privileges offered by the Academy of Natural Sciences, and the Philosophical Society.

Giving up, at least for the present, and not without reluctance, his plan of returning to his native state and studying law at Cambridge, Mr. Johnson now turned his attention to the enterprise of educational reform in Pennsylvania, in co-operation with the company of benevolent and energetic men who at that period set themselves to awaken the state from her indifference to the mental and moral condition and prospects of her youth. Devoting to this purpose whatever time could be spared from the duties of the Academy, he traveled through the state in various directions, acquainting himself with the character, condition, and wants of the inhabitants, and gathering information and statistics; and visited Harrisburg to become personally familiar with the legislators and rulers of the state. The results of these investigations he used at home, in elaborating those writings in the theory and practice of education and instruction, which he published monthly in the newspapers of that day, which attracted much notice and were widely read and widely influential. Their publication was commenced in "The Commonwealth," at Harrisburg, in 1822; with a series of thirteen essays on education, which embodied his general opinions on common schools, and on the establishment of a system in Pennsylvania. Another series of six essays on the same subject appeared in the Journal of the Franklin Institute, in 1823.

Among the pamphlets issued by him in 1825, embracing the views which he had published originally in the columns of a newspaper, was that entitled "*Observations on the Improvement of Seminaries of Learning in the United States, &c.*," in which he advo-

cated the immediate establishment of "*Schools for Teachers*;" in this particular coinciding with the views put forth at the same time by Rev. Thomas H. Gallaudet in Connecticut, James G. Carter in Massachusetts, and President Lindsley in Tennessee.

These inquiries and efforts Mr. Johnson continued for a number of years, and had the satisfaction of believing that he had been an influential assistant in procuring the passage of the law of 1834, which gave Pennsylvania a general system of public schools, and virtually proved the winning of the long contest with ignorance and prejudice. During the long series of years while this law may be said to have been maturing, not less than two hundred and twenty public acts on education had been passed by the legislature, but none of them, until this, was upon a basis broad and liberal enough to be satisfactory to the friends of education, or practical in its results. Much time and money had been spent in procuring this course of legislation, various isolated colleges, academies, &c., had been benefited, and a number of acts had been passed to establish public schools exclusively for the poor; a species of benefaction which that class, to its credit, was too independent to accept.

In the autumn of 1823, feeling that his position and prospects justified the step, Mr. Johnson united himself in marriage with the eldest daughter of Dr. Loth. Donaldson, of Medfield, Mass., with whom he lived until his death, in unbroken happiness and affection. Upon bringing home his wife, he resumed his academical duties with undiminished ardor, and was now enabled to offer much greater advantages than before to such pupils as were placed in his family and under his entire supervision.

Although faithful and successful in the labors of the position he had assumed, its numerous and often vexatious duties, and the unvarying routine of school duties, were not in harmony with Mr. Johnson's tastes, nor with his mental activity and love of positive progress in knowledge; and accordingly, when after a time an opportunity was presented him to enter upon a course of labor requiring his favorite investigations and discussions in natural science, he gladly embraced it. This opportunity was offered by the Franklin Institute, then a young but vigorous and efficient organization, and about establishing a High School, with an especial design of affording the industrial classes cheap instruction in sciences and arts. The committee appointed to carry this design into execution, requested Mr. Johnson to lay out a system of instruction for the institution, which he did; and being further

invited to carry his own plans into operation under the auspices of the Institute, he resigned his place at Germantown and removed with his family to Philadelphia in 1826. The High School was soon organized, and went into operation with a large class of pupils, with a comprehensive course of instruction, designed to prepare either for a collegiate course, professional studies, or business life.

The monitorial system was introduced into the school, as economical and also as pre-eminently available, under the circumstances, both for teachers and pupils. The third annual report, in describing the number of pupils and their studies, says, "The High School is in complete operation with its full complement of three hundred and four. Of these three hundred study the English language, one hundred and fifty-three the French, one hundred and five the Latin, fifty-five Greek, forty-five Spanish, twenty German, two hundred and forty geography, three hundred elocution, two hundred and thirty-one linear drawing, and all arithmetic or some branch of mathematics." The system of Dr. Marsais was adopted in the study of foreign languages; and manuals were prepared for Greek by Mr. Johnson, for Latin by Mr. Walker, and for French by Mr. Bolman, which were used with success. Having given much attention to Greek, Mr. Johnson believed it an error to teach it as a dead language, but that modern Greek was substantially the same as the Greek of the days of Homer, and a living language, and as such he taught it. In these views he was sustained by means of some of the most distinguished Greek scholars of our own country, and by some of the most intelligent native Greeks who have written on the subject. Mr. Johnson found that his system gave his pupils a taste and fondness for a language generally esteemed a most difficult and discouraging one; and in the short period during which they were under his instruction, many of them became able to read with ease, intelligence and propriety, the poetry of Sophocles and of Homer.

The school fully answered the design of its founders, affording at the low price of twenty-eight dollars a year, instruction in all studies which it could ordinarily be desired to follow, and enabling those of narrow means to acquire an education of a grade before attainable only by the wealthy. Encouraged by this success, the Institute proceeded to enlarge their means of diffusing knowledge by establishing professorships in several branches of science and art, the incumbents of which were to prepare and deliver an

annual course of lectures before the members of the Institute and their families. Mr. Johnson was appointed to the chair of mechanics and natural philosophy—a department for which he was peculiarly fitted, and which had always been a favorite with him. It was therefore with the zeal both of duty and pleasure that he entered upon investigations in which he took the utmost delight, but which he had never before been able to pursue far without infringing upon the time and strength due to his regular employments. With the purpose both of increasing the interest and usefulness of his lectures, and of providing for himself the means of experiment, he provided an extensive mechanical and philosophical apparatus. The classes included both sexes, and many adults, and were numerous and uniformly interested and attentive during the many succeeding seasons when his lectures were given.

Although actively engaged in the educational department of the Franklin Institute, Mr. Johnson was always ready to co-operate in promoting its general objects through other channels. He contributed to their *Journal*, took part in their deliberative and conversational meetings, engaged in its discussions of questions of practical science, and prosecuted with reference to it, either alone or with others, in elaborate researches on subjects of great importance to the arts and to mankind. Nor were his labors limited to the objects of the Institute. The Academy of Natural Sciences of Philadelphia had elected him a member soon after his removal to the city, and he took a place among its working men of science, and was in the habit of contributing to its collection, especially such minerals and fossils as he could gather during his journeys or geological explorations in the state. He was a constant attendant at their weekly meetings, and frequently presided at them, and was for some time corresponding secretary. Papers by him are also numerous scattered through their published proceedings, for the many years of his residence in Philadelphia. It is scarcely necessary to add that his personal and social relations to his contemporaries of the Institute and the Academy were invariably most pleasant.

Mr. Johnson's official connection with the Franklin Institute continued for more than ten years. At the end of that time the High School, rendered superfluous by the adoption of a general school system, was given up, though the lectures were continued. During the whole period, besides discharging his official duties, Mr. Johnson was actively engaged in researches in physical science, often with a direct bearing on the arts and practical busi-

ness; and, it is believed, with no small result in contributions to the advancement of human knowledge. Many of his most important scientific papers, and several on education, were during the same period published in the scientific journals of the day.

Mr. Johnson was not content with merely mastering all already known of any department to which his attention was turned, but was accustomed to devote uncommon powers of patient investigation, careful analysis, and logical deduction, to the endeavor to discover new facts or to establish new principles. He possessed great quickness in comprehending even the most complicated mechanical devices, and suffered no new machine which came under his observation to escape the thorough understanding of its operations and uses. This aptitude was of singular advantage to him in the many elaborate investigations in physics which he afterwards pursued, in devising new apparatus or combinations of machinery.

Among the earliest and most important of these investigations was a series of experiments to determine the strength of materials, and the best construction of steam boilers. These were set on foot by the Franklin Institute, about the year 1830, and originated in a benevolent desire to prevent the misery arising from the frequency of steamboat explosions. The Institute appointed a committee of seventeen to carry out a systematic examination of the whole subject, whose operations resulted in a wide course of investigation, occupying many of the best scientific minds of the country for several years. A sub-committee of three, Mr. Johnson, Mr. Reeves, and Prof. Bache, was entrusted with that branch of the inquiry relating to the strength of materials. They sent circulars throughout the United States and abroad, requesting facts on the subject, and materials used in the manufacture of steam-boilers, to be submitted to scientific tests. The answers received showed a deep and general interest in the subject; and in a few months the committee were in possession of abundant facts for the further prosecution of their inquiries. The Secretary of the Navy, appreciating the importance of these researches, recommended their extension, and furnished the funds necessary for incidental expenses.

This branch of the inquiry was regarded as of paramount importance, and the committee applied themselves to it with corresponding zeal, devoting to it all the time which they could save from their ordinary occupations, for three or four years. Their report appeared in 1837, in 280 octavo pages, and included a

minute detail of all their experiments, verified and illustrated by tables and plates.

While conducting these experiments, and others on steam, heat, electricity, magnetism, &c., Mr. Johnson observed many phenomena suggestive of new physical laws ; which, after verification, if of practical utility, he was accustomed to publish in some intelligible form. Of these discoveries, one of the most important was, that iron increases in strength, after being subjected to a powerful tension at an increased temperature, in the proportion of from 18 to 20 *per cent.*, with a gain in length of from 6 to 8 *per cent.* ; a law verified by numerous experiments.

The importance of this discovery was regarded as great, especially with reference to marine equipments, where, as in cables, &c., the utmost possible strength is required with the least weight. Having devised a mode for the practical application of his discovery, Mr. Johnson submitted his scheme to Judge Upshur, then Secretary of the Navy, always of liberal sentiments in relation to scientific improvements, and who appreciated the value of this, so far as to direct a proving machine then about being furnished for the navy yard at Washington, to be constructed under Mr. Johnson's directions, in such a manner as to admit the application of his improvement to chain cables and to examine its feasibility. The result justified all that had been claimed for thermo-tension, but it was found that some modifications in the usual form of the links of chain cables would be necessary in order to admit its successful application to them. In a letter written about this time Mr. Johnson says, "The experiments on chains and bars of iron, hot and cold, are continued daily. I am making efforts to introduce some improvements in the mode of fashioning the links of chains and their studs. The prejudice in regard to old habits has to be met by persevering efforts to prove incontestably the superiority of the forms which I have proposed to substitute. Every step which I take batters down some obstinate prejudice and opens an easier and easier path to the success of my proposals. In the form of the studs and cross-stays of links, I have already effected a change, and as I have four or five times in succession proved that the new form of link is itself stronger and more enduring than the old one, I have little doubt that it will also gain the ascendancy."

These experiments were never completed. They were at first discontinued in obedience to an order from the department to suspend all operations under the head of general increase, and subse-

quent imperative duties elsewhere, and changes of administration, prevented them from being resumed.

In the summer of 1836, Mr. Johnson quitted for a time the arduous occupations of the laboratory, the lecture room, and the study, for a more genial and healthful sphere of inquiry among the minerals and fossils of the coal formations of the Alleghany mountains, and of the region of the west branch of the Susquehanna.

In geology, comparatively a new science, and in its related pursuits, Mr. Johnson's attainments had hitherto been bounded by what was already known. He now, however, proposed to himself the pleasant task of independent investigation, with the hope of himself adding something to the extent of human knowledge. Having already made many investigations on the special department of the properties of iron and coal, he felt peculiar interest in studying their features in their native forms and localities. On this and subsequent occasions, indeed, he visited most of the coal fields of any note, of our own country, of Nova Scotia, and of Wales and some other parts of Europe. He also examined extensively the iron districts, studying the different ores and their localities, and collecting samples for future analysis. Some of these explorations were professional, for the benefit of mining companies, or to determine the value of lands; but an ultimate motive in all of them was the attainment of knowledge and the advancement of science; and their results were not only published in official reports to the companies interested, but were also the basis of many scientific papers which were afterwards published from time to time as occasion served. During these same explorations, no opportunity was neglected of collecting minerals, fossils, and curious or interesting relics and materials of whatever kind, relating to the natural history of the regions traversed. On one occasion, while ascending the Sinnemahoning in a skiff, he observed, high up an overhanging sandstone cliff, some rude attempts at engraving. With much labor and difficulty he had them detached, and upon examination found them to constitute a rude map of the course of that river and the country near it, and the animals found in the valley. He had it cut down to a manageable size and sent to the Academy of Natural Sciences at Philadelphia. The Pennsylvania Historical Society afterwards published a *fac simile* and description of this curious specimen of aboriginal topography.

In 1837, Mr. Johnson was appointed to take charge of the

department of magnetism, electricity, and astronomy, in the United States Exploring Expedition, as originally organized; a post which his love of knowledge and his desire of investigating a new field, induced him to accept, notwithstanding the long prospective absence from his home and family. He entered upon preparatory duties sometime before the departure of the expedition, and occupied some months in verifying and testing the instruments to be under his care, in a temporary building erected for the purpose on Rittenhouse square, in Philadelphia, and with the aid of several naval officers, and of Profs. Walker and Kendall.

Relying on the faith of the government, Mr. Johnson resigned his professorship in the Franklin Institute, for these preliminary labors, and was also obliged to make other sacrifices and preparations. But after many months of active preparation, and many more of vexatious delay, these justifiable expectations were disappointed by the abandonment of the original plan, and the reduction of the fleet, outfit, and scientific corps, to an extent and grade every way inferior. The dignity and efficiency of the scientific corps, in particular, was so much curtailed that it was with disappointed hopes and lowered expectations that those who were retained, embarked on the voyage; and it was with satisfaction rather than regret, that Mr. Johnson finally received notice from the Secretary of the Navy that his services would not be required; and the satisfaction of his family, whose scientific ardor was naturally less vivid than his own, was still greater at his announcement that he would again resume his favorite home avocations.

As the sphere of labor, and the demand for it, in the department of applied science was now constantly widening, from the wants of the increasing development of the mineral, agricultural, and industrial resources, and the general intelligence of the country, Mr. Johnson experienced no lack of employment. Besides extensive geological explorations in various parts of the country, analyses of minerals, and writing the requisite reports, he had occasion to enter, as by a natural gradation, into a new field, that of organic chemistry. The Pennsylvania College at Gettysburg, having in 1839 organized a medical department in Philadelphia, Mr. Johnson received and accepted the appointment in it of Professor of Chemistry and Natural Philosophy. In preparing for the duties of this chair, he was required to investigate the important and interesting relations between physiology, pathology, and

animal chemistry, and to prepare them for lucid explanation to his class. This required laborious study and profound thought; but the pursuit was one of fascinating interest to him, and his lectures were among the most popular of the whole course, eliciting the applause of the students and the approbation of the faculty. He retained this position for four years, at the end of which time he resigned it, to devote his undivided attention to scientific investigations requiring his presence elsewhere.

The practical knowledge which long experience had given him in relation to coal and iron, had led him to the opinion that they were the two most important productions of the country, both politically and economically; and that the extensive and rapidly increasing use of coal, especially in commerce, navigation, and manufacturing, demanded a thorough scientific investigation of the properties of all its varieties, for the ascertainment of their absolute and relative values, in generating steam, producing heat, and for other purposes. Under the conviction that such knowledge was attainable, and that it was a desideratum of especial value to the navy, Prof. Johnson addressed Secretary Upshur, with the view of obtaining the authority of Congress to institute the requisite experiments. The Secretary accordingly recommended the measure; in 1841 a bill was passed authorizing him to appropriate the necessary funds, and Prof. Johnson was authorized to commence the work. The preliminary steps were at once taken, and the navy department invited coal dealers to furnish specimens of varieties of coal for experiment.

The preparation of the necessary apparatus delayed the commencement of actual operations until the fall of 1842. The work was still for some reason suspended until 1843, when it was recommenced and industriously continued to a close in November. Forty-one samples were tested, and sixty tons of coal consumed in the experiments. A preliminary report was soon issued, giving a general account of the proceedings, for the satisfaction of the numerous inquirers on the subject. A final report however remained to be prepared, to embody in a systematised form the great mass of notes, observation, and analyses which had been accumulated, and to make it available for practical purposes. This was completed and issued by Congress in 1844, and constituted an octavo volume of 600 pages.

This report commanded universal approbation for profound and laborious research, accuracy, and extent of information. Prof. Johnson, however, considered it only the beginning of the much

greater work which he contemplated ; namely, the continuance of his investigations until they should include all the varieties of coals from the principal coal fields of the United States, and from such others as in the progress of steam navigation we might have occasion to use, and thus to form a complete work worthy of our government, and commensurate with its deep interest in the development of our physical resources. But among the innumerable objects of personal and political interest, and the changes of our officers of government, many objects of great public importance are often overlooked, and left to be neglected, or promoted by the care of private enterprise. Among others, the researches among American coals, so creditably begun, yet remain to be finished, although its plan and execution as far as completed, commanded universal approbation, and although petitions often repeated and from various sources were presented, urging Congress to continue the experiments until their advocates desisted, hopelessly discouraged.

Meanwhile, the work, as far as it goes, has become a standard authority. The British Admiralty, in the similar course of experiments shortly afterwards instituted by them, adopted Prof. Johnson's plan as the basis of their operations; and those in charge of the corresponding series of experiments in fuel under the Prussian government, not only adopted his plan of proceeding, but bore an honorable testimony to their obligations to its author, in the preface to their published report, and also in a private communication to him.

About this period, Prof. Johnson was employed in various scientific researches connected with the Navy Department. He was member of a commission to investigate the subject of floating docks, and was engaged in examining various contrivances for preventing steamboat explosions, the causes and prevention of the corrosion of sheathing copper, and several subjects of minor importance, demanding much laborious research, and the drafting of various reports, published by government on their respective occasions.

In 1845, Prof. Johnson accepted from the city of Boston, an appointment, in connection with Mr. J. Jervis, the well known civil engineer, to examine and report on the sources from which a supply of pure water might be brought into that city ; this important question having been surrounded with great difficulties during several years, from the numerous and conflicting opinions and interests combined to influence or prevent a decision ; and it

having been determined to employ two gentlemen of acknowledged competency in scientific attainments, and free from local or personal interest or prepossession. The summer of 1845 was employed in this undertaking, and Prof. Johnson's share of the task was fulfilled with much satisfaction both to himself and to the public immediately interested.

From some years after this time, Prof. Johnson was employed in labors of a more literary character. He prepared for Philadelphia publishers, editions of some of the works of Moffat, Knapp, and Weisbach, adapting them to the wants of our own schools and students by emendations and notes of his own. During the same time, his pen, always actively employed, was engaged in various other writings, always having some relation to the advancement of science or to intellectual progress.

About this period, also, he entered with zeal into the study of agricultural chemistry, and was among the first to awaken the minds of the farming population of this country to the importance and profit of the judicious practical application of the principles of chemistry to the processes of their occupation. He prepared a course of lectures on the subject, which were delivered in Philadelphia and the neighboring cities to good audiences, attracting much attention from the novelty of the subject and the ability with which it was discussed.

Always taking a deep interest in chemistry, geology, and their kindred studies, he was one of the first twenty who organized the American Association of Geologists at Philadelphia in 1840. After the enlargement of the sphere of effort of this body, by embracing all the natural sciences, and their re-organization as the American Association for the Advancement of Science, in 1848, he served as their first Secretary.

Although for the greater part of his life devoted to pursuits of a scientific character, Prof. Johnson was interested in all organizations and enterprises for general improvement, whether political, philanthropical, or educational. While at college, he joined such societies as aimed at personal improvement or the laudable exercise of the social affections. He was a zealous and efficient mason, and rose through many grades of office in their organization. He was an early and active member of the Peace Society, and of the Temperance organization. Indeed, he never allowed himself to fall under the dominion of any animal appetites; and finding himself becoming gradually more addicted to the use of tobacco, which he had learned to use at college, he discontinued its

use entirely, and never resumed it. He maintained a strict temperance in all things, through life ; believing it essential both to bodily health and mental vigor.

For mere party politics he had little taste, and never mingled in its contests, but thought and acted decidedly and vigorously on all subjects affecting the public welfare. His efforts in the course of the movement for educational reform in Pennsylvania have already been adverted to. His opinions relative to education made him a willing member of organizations for promoting it, and a participant in their counsels and efforts, so far as his occupations and location permitted. He was a member of the National Institute at Washington from its first organization, and while a resident there was an active member and constant attendant. With his fellow members, his social relations were most agreeable, to the end of his life ; and his last meeting with his friends around his own board was with them. He was honorary member of the Maryland Institute for the Promotion of the Mechanic Arts, and delivered courses of lectures before them for several successive years ; the first in 1849, and the last, which was also the last he ever delivered, in 1852. No similar effort, perhaps, ever called forth more universal approbation from its audience than did this. Its subject was "The Social and Industrial Relations of Man in Europe and America."

He was always attentive to the calls of humanity, and a friend and helper to the poor and the oppressed, whether from Europe, or his fellow-countrymen, with voice, pen, and purse. An ardent lover of liberty, both civil and religious, while he held firmly and boldly to his own opinions, which approximated most nearly to those of the Unitarian denomination, he recognized the like freedom in all others, while abhorring all bigotry, cant, and hypocrisy.

Finding his chief occupations centering in Washington, he removed thither with his family in 1848, still hoping that Congress would authorize the resumption and completion of his researches in American coals ; continuing his own scientific researches, and transacting some business connected with mining, civil engineering, and the procuring of patents.

At the organization of the London Exhibition of the Industry of all nations in 1850, Prof. Johnson took a lively interest in the enterprise, and was among the first in this country to move in the promotion of it. He was appointed secretary of the central

committee for the United States, and performed the duties of the office zealously and faithfully.

He had for some time contemplated a visit to Europe ; and as no occasion seemed likely to occur more attractive than that of the opening of the World's Exhibition in 1851, he embarked for England with part of his family, and spent some eight months in visiting England, Wales, Germany, Switzerland, Italy, and France, crowding every day and hour with a multitude of acquirements and observations treasured up for use in after years, had such been allowed him. He returned, gratified to the full extent of his expectations, both with the knowledge acquired and with the courtesy and kindness enjoyed in his brief intercourse with such men of science and learning as he met, and in the facilities given him for examining all objects of general or special interest.

In January, 1852, he was summoned to give evidence before the House of Representatives, upon the stability of the work in progress on the capitol extension ; a task which made it necessary for him to examine elaborately the qualities of the materials used and the mode of their arrangement. This occupied him several weeks, and was performed to the satisfaction of all parties.

He had scarcely completed this work, and indeed was actually engaged in his laboratory in carrying out some further researches in relation to it, when he was suddenly attacked by the fatal malady which terminated his life in the brief period of six days, on the 26th of April, 1852.

Although he had never labored with the primary purpose of accumulating wealth, he had usually been liberally paid for his professional exertions ; and his rule of moderate expenditure enabled him to live in respectable independence and generous hospitality, and to gather a comfortable provision against future contingencies.

The example of Prof. Johnson's life should encourage self-reliance. Almost from his infancy he had earned his own living. He left no debt uncanceled, and never sought for patronage from the rich or the powerful. In reliance upon divine protection and aid, he put his own hands vigorously to the work he desired to do, and steady prosperity was the result.

LIST OF PUBLICATIONS BY WALTER R. JOHNSON.

I. *Educational.*

ESSAYS (THIRTEEN) ON EDUCATION, WITH SUGGESTIONS FOR ESTABLISHING A SYSTEM OF COMMON SCHOOLS IN PENNSYLVANIA. Published in the "*Commonwealth*." Harrisburgh: 1822-23.

ESSAYS (SIX) ON EDUCATION. First published in "*Journal of Franklin Institute*." 1823.

OBSERVATIONS ON THE IMPROVEMENT OF SEMINARIES OF LEARNING IN THE UNITED STATES; with suggestions for its accomplishment, and Plan of a School for Teachers. Philadelphia: 1825.

REMARKS ON THE LEGAL PROVISIONS FOR EDUCATION IN PENNSYLVANIA. 1826.

AN ADDRESS, INTRODUCTORY TO A COURSE OF LECTURES ON MECHANICS AND NATURAL PHILOSOPHY; delivered before the Franklin Institute, of Philadelphia. 1828.

INTRODUCTION TO THE GREEK LANGUAGE, with a Key; to facilitate the literal and free translation of the text, to point out the grammatical construction of sentences, to show the inversion of style, to supply elipses, and to explain idiomatic expressions. 1829.

REMARKS ON THE DUTY OF THE SEVERAL STATES IN REGARD TO PUBLIC EDUCATION. Philadelphia: 1830.

LECTURE ON THE IMPORTANCE OF LINEAR DRAWING, *and on the Methods of Teaching the Art in Common Schools and other Seminaries*; delivered before the American Institute of Instruction. August, 1830.

REMARKS ON THE NATURE AND IMPORTANCE OF ENLARGED EDUCATION, in view of the present state of society in Europe and America. January, 1831.

A CONCISE VIEW OF THE GENERAL STATE OF EDUCATION IN THE UNITED STATES. 1831.

LECTURE ON THE UTILITY OF VISIBLE ILLUSTRATIONS; delivered at the American Institute of Instruction. August, 1832.

LEGISLATIVE ENACTMENTS OF PENNSYLVANIA ON THE SUBJECT OF EDUCATION, from the first settlement of the state, with remarks. 1833.

REMARKS ON THE NEW YORK SYSTEM OF EDUCATION. 1833.

A LETTER TO SAMUEL BRECK, ON THE SUBJECT OF COMMON SCHOOLS, MANUAL LABOR SCHOOLS, AND SEMINARIES FOR TEACHERS. First published in Hazzard's "*Register*." 1833.

A LECTURE ON SCHOOLS OF ARTS; delivered before the American Institute of Instruction at its Annual Meeting. Boston, August, 25th, 1835.

MEMORIAL (TO THE CONGRESS OF THE UNITED STATES,) PRAYING FOR THE ESTABLISHMENT OF A NATIONAL INSTITUTION, for the prosecution of experiments and researches in those physical sciences which are required by the public service, and for the general welfare of the country. May 31, 1838.

ADDRESS, DELIVERED AT THE LAYING OF THE CORNER STONE OF THE ACADEMY OF NATURAL SCIENCES, IN PHILADELPHIA. 1839.

A LECTURE, INTRODUCTORY TO A COURSE ON CHEMISTRY AND NATURAL PHILOSOPHY, in the Medical Department of Pennsylvania College; delivered November 3rd, 1840.

LECTURE ON THE MECHANICAL INDUSTRY AND THE INVENTIVE GENIUS OF AMERICA. Delivered before the Maryland Institute for promoting the Mechanic Arts. Baltimore, January 16, 1849.

II. *Scientific and Miscellaneous.*

Mr. Johnson published over fifty papers and reports on scientific subjects—all of them characterized by thorough, patient research and sound practical conclusions, and many of them prepared at the request of different departments of the government, and printed by order of Congress.

SCHOOLS FOR TEACHERS.

BY WALTER R. JOHNSON.

IN 1825, Walter R. Johnson, Principal of the Academy at Germantown, Pennsylvania, published a pamphlet of 28 pages, entitled "*Observations on the Improvement of Seminaries of Learning in the United States: with Suggestions for its Accomplishment.*"* The principal suggestion for the improvement of educational institutions of every grade, was the establishment of *Schools for Teachers*.

This end (the improvement of seminaries of learning) is proposed to be accomplished by the introduction of a class of schools hitherto unknown in our country, but for which the public exigencies seem loudly to call, and these are *schools for teachers*. This plan is not offered as in itself a novelty; it has long been in successful operation in some countries on the continent of Europe, particularly in Germany (a region to which modern learning owes more than the learned are all willing to acknowledge), and there its beneficial influence is seen in every aspect of society. Some, we are aware, will be ready to object that we have hitherto been supplied, *without* such establishments, with as many teachers as could find employment, and with more than ever *deserved* it. True; and this is precisely the reason for founding institutions which shall afford a supply of *such as may deserve* the public confidence.

It is believed that the demand for good instructors is increasing in our country, in a ratio far exceeding that of the augmentation of our population. This belief is founded upon the consideration that many of the States, which have hitherto been destitute of school systems, are now forming plans for the general or universal diffusion of knowledge: that higher institutions, as well as common schools, are in all parts of the Union becoming the objects of favor and attention, to a degree heretofore unequalled: that in seminaries of every grade, the number of branches expected to be taught, is much greater than formerly: that in every quarter it is beginning to be understood, that under free political institutions, the cause of good learning is the foundation of success to all other good causes, and that as the public become enlightened on the subject, they are also becoming better qualified to distinguish the able from the imbecile, and those who act from principle from those who follow caprice or sordid interest alone. It is daily made more and more evident, even to those who reflect but little, that every man is not by nature an instructor; a truth which seems to have been overlooked by those who have been ready to employ the weak, untaught, and inexperienced for those offices in which eminent abilities, thorough instruction, and extensive experience are of the utmost importance. Besides, the qualifications of instructors must bear some proportion to the attainments required by their pupils in after life, by the circumstances in which they are to be placed. Adverting, then, to the qualifications *now* demanded of those who are to fill stations of public trust, or to occupy a distinguished rank in the affairs of private life, we may be fur-

* The following remark of Dr. Watts is quoted in the title-page as the *text* for the observations which follow:

"Instructors should have skill in the *art or method* of teaching. It is a great unhappiness indeed when persons, by a spirit of party or faction, or interest, or by *purchase*, are set up for tutors, who have neither due knowledge of science nor skill in the way of *communication*—for the poor pupils fare accordingly, and grow lean in their understandings."

ther convinced of the increasing demand for superior talents and high attainments, in those who are to form the character of our youthful citizens. Not only are our executive and legislative offices, in conformity with the public wishes, filled with the most eminent scholars of our country; not only do the bar, the bench, and the pulpit demand, as heretofore, the best talents of the community, but our army and navy also are beginning to make high intellectual attainments their principal passports to honor and promotion. Agriculture, manufactures, and commerce are calling to their aid men of science, intelligence, and liberality of mind; and the impulse given to physical improvements, implies the future demand for a large amount of energetic mental powers. To be ignorant of the rudiments of education, is at present regarded by persons of all ranks, and even of all complexions, as a serious misfortune; and in some parts of our country, as a heavy, positive reproach, to be covered neither by graces of person, respectability of parentage, nor splendor of fortune. Neither the sons nor the daughters of America feel that they have discharged their duty, either to themselves or to their country, until they have redeemed from a state of waste some good portion of that intellectual inheritance which has fallen to their share. Accordingly, we find that in districts of country where yesterday the first crash of the falling forest was heard, to-day the voice of science rises from the walls of her neat and classic habitation; and where within the memory of the present generation the shrieking matron was torn from her infant daughter by the ruthless savage, that daughter is *now*, amidst scenes of comfort and elegance, storing her mind with every solid and useful accomplishment, and *possibly* finds by her side the daughter of that very savage, an ardent but generous rival in the same ennobling employment.

These facts of themselves suggest, that a larger number than heretofore of persons able and willing to devote superior powers to the development of mind and communication of knowledge, must be employed in these responsible offices. Instead, then, of being regarded as surprising, that a project of this kind should be suggested at all, we ought, perhaps, under a view of all the circumstances, to think it remarkable that it has not been done sooner: that (while every other profession has its appropriate schools for preparation, *that* on which the usefulness and respectability of all others essentially depend, is left to the will of chance, or "*to take care of itself*." We have theological seminaries—law schools—medical colleges—military academies—institutes for mechanics—and colleges of pharmacy for apothecaries; but no shadow of an appropriate institution to qualify persons for discharging with ability and success, the duties of *instruction*, either in these professional seminaries, or in any other. Men have been apparently presumed to be qualified to *teach*, from the moment that they passed the period of ordinary pupilage;—a supposition which, with a few exceptions, must, of course, lead only to disappointment and mortification. It has often been asked why men will not devote themselves *permanently* to the profession of teaching. Among other reasons, much weight is, no doubt, to be attached to this want of preparation, and to the discouragements and perplexities encountered in blindly attempting to hit upon the right course of procedure. (Many persons, we have reason to believe, commence the business of instructing, not only with few of the qualifications for communicating knowledge, but even without any fixed plan of proceeding, or any definite ideas of the peculiar duties and difficulties of the employment.) With such persons, the operation is altogether *tentative*—a system of temporary expedients—or no system at all. They begin *somehow*—follow one course for a time, then drop it for another, which (finding it equally unsuitable) they abandon for some new project, that chance or caprice brings in their way, or, which is perhaps more common, after having found their good intentions unappreciated, and their labors unrewarded, they abandon in disgust both the plan and the profession together. And happy will it be, if in this unprofitable course of groping in the dark, they have done nothing worse than to fail in attaining the object of their pursuit;—happy if they have not wasted their health, impaired their mental energies, diminished their social propensities, and lost their relish for the refinements of literature and the researches

of science. To obviate in some degree these difficulties, to render his duties less irksome to the teacher, and more profitable to the pupil—to give to our institutions of learning (already the subjects of much applause) a still higher character, and thereby to subserve the interests of our country and of humanity—it is proposed to afford, by the institutions in question, an opportunity, to those who are designed for teachers, of making themselves theoretically and practically acquainted with the duties which they will be called upon to discharge, *before* they enter upon the performance of their trusts. In order, however, to afford illustrations of the principles of education, it is indispensable that *practice* should be added to precept, and that, too, in situations favorable to the operation of those causes which display both the powers of the mind, and the peculiarities of the several departments of science and art. The school for teachers, then, ought not to be an insulated establishment, but to be connected with some institution, where an extensive range in the sciences is taken, and where pupils of different classes are pursuing the various departments of education adapted to their respective ages. The practice of superintending, of arranging into classes, instructing and governing, ought to form *one* part of the duty of the young teacher. The attending of lectures on the science of mental development, and the various collateral topics, should constitute another. An extensive course of reading and study of authors who have written with ability and practical good sense on the subject, would be necessary, in order to expand the mind, and free it from those prejudices which, on this subject, are apt to adhere even to persons who fancy themselves farthest removed from their influence. The present is not an age when narrow prejudices of any kind can be expected to enjoy toleration and support; and, least of all, can such favor be expected for the prejudices of instructors, who, from the very relation in which they stand to their pupils, ought to be foremost in eradicating the absurd notions which a false estimate of things, and a wrong application of terms, have implanted in the mind. That this is not at present the characteristic of instructors, there is but too much reason to fear; and that the course here recommended would beget a more liberal spirit, there is every reason to hope. That class of prejudices, in particular, which arises from a disposition to form or adopt fanciful theories not reducible to practice, would be corrected by reading the kind of authors here recommended; and the same effect would be insured by adhering, in the choice of lecturers, to those, who, added to a truly philosophical character, have possessed an extensive *experience* in the duties of instruction. Should it be necessary, there might also be provision for the pursuit of other sciences in addition to that of teaching, by those who are preparing for that office. A perfect plan for the education of teachers and professors, would require that the institution, with which the school for teachers is proposed to be connected, should embrace a complete circle of the Sciences and Arts, and that a professor should be appointed to lecture on the mode of teaching in each separate department. But besides that few, if any, institutions of our country extend to so great a number of objects, there would be an insuperable obstacle to the execution of such a plan, in the *expense* which must necessarily be incurred—an expense which no authority short of the highest legislative body in the nation would, perhaps, feel itself adequate to meet—and *that* body has hitherto shown an aversion to extend its interpretation of “the general welfare” so far as to embrace the trifling subject of educating the sons and daughters of a republic.

In view of these difficulties, therefore, it would be advisable, at least for the present, to extend the plan no further than to comprehend—

I. A course of lectures and practical illustrations on the subject of *intellectual philosophy*, as connected with the science of education.

II. A course on *physical education* and *police*.

III. On the mode of conveying instruction in the *exact* and *physical sciences*, and the various descriptive and mechanic arts.

IV. On the manner of teaching languages, belles-lettres, history, and, in general, all those branches commonly classed under the *philological department*.

Each course must of necessity embrace a large number of particulars. Each

has some affinity in its topics to all the rest, but not so near as to cause one lecturer essentially to encroach on the province of another.

The first course would embrace the subjects of resemblances and differences in the capacities of different individuals; the proper season for developing each faculty; the kind of study adapted to produce that development; the intermixture of different pursuits suitable to store and discipline the mind at different ages; the anomalies of talent which have been noticed or recorded, and their causes so far as known; the influence of moral causes upon the intellectual character of youth; and, in general, the effects of all the various departments of science, literature, and arts, and of the different modes of presenting them to the mind, towards perfecting the human understanding and character.

The second of the above-mentioned courses would include all that relates to the management of infancy, the personal habits, form, physiognomy, and health of children and youth, and their different capabilities of learning, so far as affected or indicated by these circumstances; the manners, exercises, amusements, indulgences of young persons, especially when employed in their education; the time and manner of attending to study, conveniences for private study and public recitation; arrangement of class-rooms for different purposes to be illustrated by drawings; the maintenance of order and expedients for enforcing it, together with the nature and application of stimulants, rewards, and punishments, and the temper, language, and general demeanor of instructors.

The third department of lectures would include the theory and practice of teaching in the several branches of common education, such as orthography, reading (mechanically), writing, arithmetic, and geography; the pure and mixed mathematics, physical astronomy, natural philosophy, chemistry, botany, mineralogy, anatomy, drawing, engraving, horticulture, and mechanic trades.

The last course would comprise directions to professors and teachers in a great diversity of branches, including not only the subjects usually taught at seminaries of learning, but also those which pertain to the several learned professions. Among these may be mentioned rhetorical reading, composition, logic, metaphysics, foreign and learned languages, history, chronology, law, theology, and medicine.

The auditors ought to receive advice and instruction from the lecturers in respect to their course of reading on the several topics presented in the lectures, and be arranged, and taught as their own pupils are to be afterwards, in classes according to their several capacities and attainments. As the auditors are supposed to be engaged, a part of their time, in the practice of instructing, it will become the duty of the lecturers to attend and observe their mode of conducting the exercises of their respective classes, and to comment upon it at subsequent lectures; affording to all an opportunity for free discussion and candid interchange of opinions on every topic arising out of the practice of a teacher. The course here marked out, might, probably, with the time taken up in practical teaching, occupy at least one year, and at the expiration of that time, a certificate might be given to each individual, stating the length of time he had employed, the qualifications he had exhibited, and the success he had attained in the several branches of instruction. It is, however, presumed, that in this case, the candidates for approbation had come to the institution well grounded in all those branches of learning of which they proposed to become teachers; otherwise a longer time might be required. In the former case, the *instructions* given them by lecturers on education would have for their object, to render them more familiar with the several subjects by frequent and careful *revisions*. In addition to this, some well-digested treatise on the subject of education might be selected and studied,—recitations being conducted after the manner of those in history or ethics. The lecturers might further be serviceable to the cause of education, by establishing and conducting, on liberal and philosophical principles, a *journal* to be devoted to that subject, and to embrace such kinds and varieties of objects as might render it instructing and entertaining to youth, to parents, and to instructors.



Painted by J. H. P. & Co. 1840

Maria Dacre

X. FRANCIS DOWD.

Francis Dowd, a native of New York, was born in 1842. He was educated in the common schools of his native State, and attended the New York University. He was a member of the New York State Bar, and was admitted to the practice of law in 1868.

For many years he was a member of the New York State Bar, and was admitted to the practice of law in 1868. He was a member of the New York State Bar, and was admitted to the practice of law in 1868. He was a member of the New York State Bar, and was admitted to the practice of law in 1868. He was a member of the New York State Bar, and was admitted to the practice of law in 1868.

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The name of FRANCIS DOWD is well known to all who are interested in the history of the State of New York. He was a member of the New York State Bar, and was admitted to the practice of law in 1868. He was a member of the New York State Bar, and was admitted to the practice of law in 1868. He was a member of the New York State Bar, and was admitted to the practice of law in 1868. He was a member of the New York State Bar, and was admitted to the practice of law in 1868.

FRANCIS DOWD, was



X. FRANCIS DWIGHT.

"I am to speak of a life, passed over without noise; of modesty at home and abroad; of continence; charity; contempt of the world and thirst after heavenly things; of unwearied labors; and all actions so performed as might be exemplary or beneficial to others."—*"Martyrology,"* vol. I., p. 1884.

THE legitimate aim of biography is the exaltation of human character, not seeking to eulogize with fulsome panegyric its subject, but depicting, with the pencil of truth, the glowing virtues of the wise and good, not so much to praise and canonize the departed, however excellent, as to exert through their bright example a beneficial influence upon the present and future generations.

There are men whose lives are an epitome of self-sacrifice and usefulness, who pass through the brief struggle of mortal existence so calmly and unobtrusively that, like the graceful rivulet in the meadow field, imparting freshness and fragrance to all around, they move on through life without commotion, exciting no envious rivalry, escaping from angry collisions, and passing quietly away; having fulfilled a high and noble destiny.

It is a delightful duty to hold up such an example to those who are seeking true wisdom, and to illustrate, by a truthful exhibition of character, the qualities, attainments, and habits, which inevitably lead to honorable and useful distinction, and most tend to benefit the human race.

The name of FRANCIS DWIGHT stands high in the catalogue of those estimable and self-devoting characters who seek to do good to their fellow-men in their sphere of action. Connected with one of the oldest and best families in our country, descended from ancestors celebrated for their exalted religious and literary attainments, and their strict application of them to practical objects and ends, he early imbibed a proper sense of obligation to exert all his powers, to live up to the standard which his progenitors had reared for his imitation. Well he redeemed this cherished purpose of his soul—his short but earnest labors, during a brief career, left his fair family name not only untarnished, but imparted to it additional lustre, by his self-sacrificing devotion to advance the empire of the mind.

FRANCIS DWIGHT was born in Springfield, Mass., on the fourteenth

of March, 1808. At a very early period he gave promise of future proficiency. Possessed of an ardent temperament and strong will, he evinced an unconquerable determination to excel in the acquisition of knowledge. At the age of fourteen, (1822,) he entered Philip's Academy, at Exeter. When sixteen, (1824,) he entered Harvard University, at Cambridge, graduating therefrom in August, 1827, when he entered the law school of Northampton, in September, 1827, where he pursued the study of the law for two years.

On the first of September, 1829, he became a member of the law school, in Harvard University, and in July, 1830, he received most gratifying testimonials from Hon. Joseph Story, of the United States Supreme Court, and the Hon. John H. Ashman, both professors of the law institution at Cambridge. The name of Judge Story, the Dane professor of law at Harvard, associated as it is with the most distinguished judicial and private honor, will live, so long as talents and virtue command respect. An endorsement from that source was truly an inestimable passport, and it was with pride that Mr. Dwight could claim the friendship and regard of that eminent jurist.

When about to separate, Judge Story placed in the hands of Mr. Dwight the expression of his opinion that, during his studentship, he had been "very diligent and attentive to his studies, and irreproachable in his conduct and character," and "I take pleasure," he says, "in adding, that his talents and professional attainments entitle him to the confidence and respect of the profession and the public."

The severe application of Mr. Dwight compelled a short cessation from his professional studies, and he, soon after leaving Cambridge, visited Europe for a year or two, where he followed his literary tastes, and reveled in the enjoyment of association with many of the distinguished men who then filled the public eye; visiting all parts of Europe; examining the public institutions of France, England, and Germany, especially those pertaining to education; and employing his mind, while in the pursuit of health, upon those subjects which he thought might be appropriated usefully thereafter, to benefit the institutions of his own country. He seems to have kept his faculties constantly exercised, and prepared to receive every impression which surrounding objects might afford. It is thought his benevolent mind was first directed, during his tour abroad, to the subject of improved facilities of education for his countrymen, when contemplating the wide-spread despotism and misery existing in foreign nations, the certain offspring of ignorance and vice.

In 1834, he was admitted to the practice of the law, as an attorney at the bar of the Supreme Judicial Court of Massachusetts.

In 1835, he removed to Michigan Territory, where he was admitted to practice as an attorney and counselor.

In 1838, he commenced his residence in the State of New York, and was admitted to practice as attorney and counselor by Chief Justice Nelson, and, in 1840, was admitted, by Chancellor Walworth, to practice in the Court of Chancery.

Mr. Dwight resided, at this time, at Geneva, Ontario County. At this delightful retreat, his natural temperament had full indulgence in the calm, but industrious pursuit of learning, and not a moment was lost in storing and adorning, by hard study and investigation, his cultivated mind.

Mr. Dwight was an early and enthusiastic admirer of the gigantic intellect, and consummate statesmanship, of De Witt Clinton, and cordially adopted the philosophical and benignant sentiments of that illustrious man, as expressed in his gubernatorial message to the legislature, in 1828.

"Permit me," says Gov. Clinton, "to solicit your attention to the two extremes of education, the highest and the lowest. And this I do, in order to promote the cultivation of those to whom fortune has denied the means of education. Let it be our ambition (and no ambition can be more laudable,) to dispense to the obscure, the poor, the humble, the friendless, and the depressed, the power of rising to usefulness, and acquiring distinction." Here he first originated and embarked in the novel and also important enterprise of establishing, under state patronage, a journal to be devoted exclusively to the cause of education. There were great discouragements in the undertaking, but Mr. Dwight was not of a mold to succumb to any obstacles; he adopted, in all of his resolutions, the inimitable remark of Buxton: "The great difference between the great and the little, the powerful and the feeble, is made by energy, an invincible determination,—a purpose once fixed, and then death or victory." Aware, however, of the responsibilities he proposed to assume, he wisely consulted with older heads, and with those whose countenance and influence could best sustain his efforts. At that time, learned and prominent public men, and wealthy private individuals, were manifesting deep interest in the cause of education. Mr. Dwight judiciously sought the counsel and advice of many of them, and in all quarters, and from the highest and best sources he received encouragement and promise of support. The Hon. John C. Spencer, being then, as secretary of state ex-officio, superintendent of the common schools of the state, a duty which he performed with his accustomed energy and zeal, was written to by Mr. Dwight, respecting his project, and

Mr. Spencer's reply (dated Albany, Dec. 9th, 1839,) greatly encouraged and stimulated his exertions. He says:—

Your letter of the 7th is received. I have long felt the want of a common school journal, through which my own communications might be made to commissioners and trustees, and which otherwise might be made a channel of valuable information. I know nothing which promises so much immediate benefit to common schools, and the cause of education generally. I am very glad you have turned your thoughts to the subject, and I do not hesitate to say that I deem you better qualified than any other person I know to conduct such a journal. I am clearly of opinion that such a paper should be published at the seat of government. At that point there is a concentration of intelligence, and of interest, that can exist nowhere else. My wish, therefore, would be that you should come to this city, and establish a paper devoted to education, that should be worthy of our state, and of the character she has already acquired.

And again, on 3d February, 1840, Mr. Spencer writes:—

I approve, heartily, of the plan of the journal for common schools contained in your letter of the 30th ult., and I should be glad to have you issue a number as a *specimen*. I entertain little doubt that the legislature will authorize me to subscribe for 10,000 copies, at \$2500; but of course I can not guaranty it, and I suppose, until that subscription is made, I can not say absolutely *go on*. But the exhibition of a specimen number would, of itself, have great influence. We want a *new name*, that shall be appropriate; what say you to

"The District School Journal for the State of New York."

This means something different from the *Common School Journal*, and refers directly to our system. If you conclude to print, let me know, and I will give you a letter of encouragement to publish, and, I doubt not, Gen. Dix will do the same.

In the month of March, 1840, Mr. Dwight commenced the journal, adopting the name recommended by Mr. Spencer. Its appearance produced a wide-spread sensation, and it was received with marked satisfaction by all interested in the great cause of education throughout the state. Mr. Spencer (March 28th, 1840,) writes, to Mr. Dwight:

I have received the copies of the District School Journal which you sent me, and am much pleased with its matter and manner. It is well filled, and its typography is beautiful. I hear it spoken of by several already, in high terms—have read one of them with great satisfaction. The selections are good, the tone and spirit is right, and every thing is as it should be.

Thus fortified and supported by the head of the school department, Mr. Dwight persevered in his adventurous task, and most efficiently and successfully did he discharge his editorial duties. He soon adopted the advice of the secretary of state, and removed to Albany, which proved a better location for the diffusion of his journal.

Very soon after reaching Albany, he was strongly urged to enter the political arena, and take part in the great presidential struggle, but he resolutely declined all solicitations of that kind. Although high official distinctions were promised, he could not be prevailed upon to quit the path of duty he had marked out for his future conduct. The turbid waters of politics were uncongenial to his tastes and habits, and he decided sensibly and definitely, to reject all inducements of official preferment, and to devote his life and talents to the great cause of *popular education*.

Mr. Dwight's singleness of purpose, and unwearied assiduity, secured the cordial co-operation and approval of the public authorities at the capitol, and, during a period of five years, his *District School Journal* was the focus which attracted, and cemented together, all the elements in the state, favorable to the great cause in which he was engaged. Mr. Dwight's modest deportment and captivating manners won for him golden opinions and sincere regard; it was remarked by those in closest communion with him,—

"His tongue is still in concert with his heart,—
His simplest words an unknown grace impart,—
His air, his looks, proclaim an honest bent,
And, ere he speaks, we yield our full assent."

He soon became pre-eminent in official station. He was selected as county superintendent of common schools for the city and county of Albany, and in that character, for several years, visited and reformed the schools under his jurisdiction; and his reports to the superintendent of common schools, display an admirable familiarity with the subject. He was one of the members and secretary of the board of common schools of the city of Albany; and, on 1st June, 1844, was unanimously appointed, by the regents of the university, one of a board, or executive committee, for the care, government, and management of the "*Normal School*," his colleagues being the superintendent of common schools, (Col. Samuel Young,) Rev. Alonzo Potter, Hon. Gideon Hawley, and Rev. Wm. H. Campbell.

In the midst of his many labors, arduous and unremitting, but performed, with delight because his heart was in the work,—at the time when the seed he had scattered broadcast, was ripening into a harvest of generally acknowledged usefulness,—with a larger measure of social and domestic happiness than is meted out to but few men, and with a future full of promise to him in all his relations, public and private, his brief and bright career was extinguished by death on the 15th of December, 1845, at the age of thirty-seven.

We can not better close this imperfect sketch than by recording here some of the many public and private expressions of sorrow which this event elicited. They afford the best possible evidence of the high appreciation of his services to the cause of education, and of his private worth, entertained by those who were associated with him in public trust, or who knew him well in the inner circle of his home, and of private friendship.

The executive committee of the state normal school, on motion of Mr. Benton, secretary of state, passed resolutions of condolence, expressing their appreciation, in the highest degree, of the eminent serv-

ices of Mr. Dwight, their late associate secretary and treasurer, as an ardent and most devoted friend of popular education, and an active and efficient member of that board. Similar resolutions were passed by the normal school, by the Albany teachers, and by a large number of the county school associations.

The Hon. Henry Barnard, then Commissioner of Public Schools in the State of Rhode Island after noticing the circumstances of Mr. Dwight's death, in the "*Journal of the R. I. Institute of Instruction*," closes with the following condensed summary of his labors and character.

At the time of his death, Mr. Dwight was a member of the executive committee of the state normal school, at Albany, as well as secretary and treasurer of the board, member and secretary of the board of commissioners of the district schools of Albany, and editor of the District School Journal of the State of New York. Since 1838, he has labored with a zeal, devotion, and intelligence surpassed by no other, in behalf of the various features of improvement which have been incorporated into the noble system of elementary instruction, of which the Empire State is now so justly proud. One of the first, if not the first Union School in the state, was established mainly by his efforts in the village of Geneva. The District School Journal was started originally at his own risk, as an indispensable auxiliary in the work of improving common schools. The system of county supervision, and of a single executive officer for each town, instead of the irresponsible and complicated plan of numerous commissioners and inspectors for each town; the origination and organization of the state normal school; the local improvements in the district schools of the city of Albany; and the various conventions of the county superintendents, found in him an early and earnest friend, co-operator, and advocate. He had consecrated himself to the great work of making education,—education in its large and true sense,—the birthright and birth blessing of every child, whether rich or poor, within the bounds of New York; and, for this object, he was willing to labor, in season and out of season, and to spend and be spent. But in the midst of his labors and his usefulness, he has been cut down; and, to use the language of his associates in the superintendence of the normal school, "in this sudden and afflictive event we recognize the frailty of earthly anticipations, and that neither distinguished public services, nor the highest prospect of future usefulness, nor 'troops of friends,' nor high responsibilities and far-reaching benevolence, nor worth, nor talents, can avert the inevitable hour." We dare not intrude upon the sacredness of private sorrow further than to add, that it was in the courtesies of private life, in the faithful discharge of all the duties of a friend, brother, husband, and father, that the excellencies of Mr. Dwight's character were best seen; and it is in these relations that his death is most severely felt.

An appropriate notice of the event, from the pen of the Hon. Horace Mann, appeared in the "*Common School Journal*," published in Massachusetts, in which, with great force and beauty, he depicted the merits of his departed friend:—

Before entering upon the discussion of any of the topics appropriate to the present occasion, we have the melancholy duty to perform of announcing the death of our personal friend and co-laborer, Francis Dwight, Esq., of Albany, so long and so widely known as the able, the sincere, and the efficient advocate of common schools. With other eminent friends of popular education in the State of New York, Mr. Dwight had been actively instrumental in devising, and in causing to be placed upon the statute book, the present code of laws on the subject of public instruction in that state, which code, at the time of its adoption, and until it had been substantially copied by other legislatures, was the most perfectly organized and

efficient system in the world. In all these stations of honor and of trust, Mr. Dwight had conducted himself with great discretion, ability, and zeal. As an examiner of schools, he was competent, impartial, and thorough; having the readiest disposition to discover and to applaud the acquisition of knowledge, and the justice to unmask and expose pretension and ignorance. As a member of the executive committee of the state normal school at Albany, he assisted in establishing that school upon a most admirable foundation, whether we consider the course of instruction there pursued, or the inducements held out to invite talent and educational enterprise from all parts of the state to avail themselves of its advantages. As editor of the District School Journal, being aided by the patronage of the state, which, at the expense of the common school fund, sends one copy of the Journal to every school district within its ample borders, he has spread before the people an amount of documentary information on the organization, the defects, and means of improvement, of common schools, more copious than was ever distributed before, in any part of the world. Continually supplied with their able reports by the county superintendents, the Journal has made the atmosphere of New York nutritious with common school ideas, and electric with common school zeal.

In the prime of life, and in the full vigor and maturity of his powers, and capability of discharging his duties, Mr. Dwight has left that noble sphere of action, which, from the affinities of his own mind to virtue and to usefulness, he had chosen. Public sorrow and private friendship mingle their regrets at his loss. At this season, when the harvest is so plenteous but the laborers are so few, ill can such a workman be spared.

The press throughout the state united in the expression of regret at so "irreparable a loss." The following notice from the pen of S. S. Randall, Esq., appeared in the District School Journal, Jan., 1846:—

In place of the customary gratulations of this festive season, our columns are this month clothed in the habiliments of mourning, in consequence of the lamented death of him who has heretofore, and for so long a period, been their guiding and informing spirit! On the 15th of December, ult., that spirit took its flight from earth to heaven, leaving desolation, solitude, and deep affliction to his bereaved family, and a large circle of acquaintances and friends. The numerous and touching testimonials of the various public bodies with which he was connected at the time of his death, and which we take the melancholy satisfaction in transferring to our columns, show the estimation and regard in which he was held by them and by the community in which he resided; but the loss which that community and the interests of popular education have sustained, can not be adequately expressed in words. Although liberally educated and furnished with all the advantages which wealth and foreign travel could supply, Mr. Dwight had devoted every energy of his fine talents and richly cultivated mind to the advancement of the interests of common school education. Industrious, indefatigable, judicious, and discriminating, he had availed himself of every practicable source of information and knowledge, which might in any way be brought to bear upon this great field of labor and usefulness; and "the cause he knew not, he searched out." He was a most efficient auxiliary in the establishment and organization of the existing common school system; and has uniformly been one of its most ardent and enthusiastic supporters and defenders, "through evil and through good report." In the discharge of the various public duties which were, from time to time, cast upon him, he was accurate, thorough, and efficient; and many an educator of youth will trace to the well-filled pages of this Journal, while under his immediate supervision, the germs of excellence and the materials of future progress in an arduous and laborious profession. As a man and a citizen, he was universally beloved and respected; and, if a life of earnest and constant endeavor to be useful in his generation, constitutes any test of christian charity, and religious hope, those consolations of the word of God, which cheered his dying hours and illumined the "dark valley of the shadow of death," afford the most gratifying assurance, that for him "to die was gain."

His funeral was attended on the 18th ult. from his late residence; and, notwithstanding the inclemency of the day, all classes of our citizens united in paying the last tribute of respect and affection to their deceased friend. The adja-

cent churches were thrown open for the accommodation of the pupils of the public schools, and such others as could not obtain entrance into the house; and the procession of citizens, on foot and in sleighs, was one of the largest and most imposing ever known in our city. In short, on no occasion have we ever known a more deep and general feeling of sympathy and grief than that which pervaded all classes of our community on the receipt of the melancholy intelligence of the death of our distinguished friend.

We have been permitted to peruse a note of condolence, written to his relict, (Dec. 18th, 1845,) by a distinguished friend of the deceased, the Hon. D. D. Barnard, of Albany, from which we make a few extracts:—

I hope it may not be deemed altogether an intrusion upon a grief so unspeakable as yours must be, that I seek to offer you in this way, in a single word or two, the expression of my heart-felt sympathy. I believe I know, better than any one out of his own family circle, what a loss you have met with in the death of your husband. I had, years ago, an opportunity to become most intimately acquainted with him; and, as he was utterly guileless, *I did* know him thoroughly, and just as truly as I knew him. I loved him. I loved him, and mourn him as a brother. How vividly are now revived within me the unforgotten, and never to be forgotten, impressions then made on me, by his brilliant parts, his manly bearing, his high-souled generosity, his gentle heart, as tender and loving as a woman's. May I not hope it may tend a little to soothe the violence of your grief to know that he was well appreciated and sincerely loved? He had troops of grateful friends here, and all over the state, and his death is felt, and will be felt, as a severe public loss. This is something for you to know; but I wish you to know also that, for one, from the bottom of my heart I loved him. Happy as he was, happy in his family, and above all in you, respected by the world, and doing a world of good, how hard it must have been for him to die; and yet, as I am told, he was so calm, so composed, so resigned! This was like him; and, besides, he was a Christian. Let us bless God for this, and take comfort; and may God's own gracious arm, and his abundant love, sustain, revive, and console you.

We conclude by another quotation from a letter addressed to the widow of Mr. Dwight, by the Hon. Henry Barnard, of Hartford, Conn., then of Providence, R. I.:—

No death in the whole circle of my friends could have occurred so utterly unexpected, so startling in its announcement, as that of your husband. This very week, I anticipated spending a few days with him, that we might take sweet counsel together, on subjects to which we were mutually devoted. Although every where respected, and numbering troops of friends, it was in the walks of private life, in the numberless, nameless acts of kindness and of love, which marked his in-door family daily history, that the purest and most attractive traits of his character were exhibited, and that his loss will be longest and most deeply felt.

As a laborer in the same field, I feel his loss most heavily. No one could be more sincerely wedded to any cause, more willing to spend and be spent in its service, than he was to the cause of a generous and complete education of the whole people. Such laborers are few; and God grant that the standard, which he bore aloft so steadily, may fall into hands as strong—it can not be protected by a heart more true.



D. P. Mayo.

Principal of the State Animal School.

Utah.

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the 1990s, the number of people in the United States who are aged 65 and older is projected to increase from 20 million to 35 million. By the year 2020, the number of people aged 65 and older is projected to increase to 40 million. Since 1980, the number of people aged 65 and older has increased by 10 million. The number of people aged 65 and older is projected to increase by 15 million by the year 2020. The number of people aged 65 and older is projected to increase by 20 million by the year 2030. The number of people aged 65 and older is projected to increase by 25 million by the year 2040. The number of people aged 65 and older is projected to increase by 30 million by the year 2050. The number of people aged 65 and older is projected to increase by 35 million by the year 2060. The number of people aged 65 and older is projected to increase by 40 million by the year 2070. The number of people aged 65 and older is projected to increase by 45 million by the year 2080. The number of people aged 65 and older is projected to increase by 50 million by the year 2090. The number of people aged 65 and older is projected to increase by 55 million by the year 2100.

the whole of the report to ensure that every one of the 100,000 troops for ground forces, 100,000 for the air force, and 100,000 for the navy was accounted for. The report was too good to be true, and the committee's report to the House of Commons was accordingly a little more guarded.



University of the South Atlantic

Albany, N.Y.

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XI. DAVID PERKINS PAGE.

AMONG the self-educated teachers of our time, the men who, as was said of old of poets, "were born, not made" teachers, and in whom the instinct for knowledge, and for imparting it to others, was sufficiently strong to overpower all obstacles, and carry them to the highest eminence in their profession, there are none who have excelled the subject of this brief memoir.

DAVID PERKINS PAGE was born at Epping, New Hampshire, on the 4th of July, 1810. His father was a prosperous, though not affluent farmer, and his early life was passed as a farmer's boy, with that scant dole of instruction which, forty years ago, fell to the lot of farmer's sons in small country villages in New Hampshire, or, for that matter, any where in New England. From his earliest years, however, the love of books was the master passion of his soul, and in his childhood, he plead often and earnestly with his father for the privilege of attending an academy in a neighboring town, but the father was inexorable; he had determined that David should succeed him in the management of the farm, and he did not consider an academical education necessary for this. His refusal doubtless exerted a good influence on his son; for a mind so active as his, if denied the advantages of the school, must find vent in some exercise, and the admirable illustrations he drew from nature, so often, to embellish and enforce his instructions in after years, showed conclusively that, at this period of his life, the pages of the wondrous book of nature had been wide open before him, even though his father's fiat had deprived him of other sources of information.

But He who guides the steps of his creatures had provided a way for the gratification of the thirst for knowledge which was consuming the farmer's boy, and that by what seemed an untoward Providence. At the age of sixteen, he was brought to the borders of the grave by a severe illness; for a long time he lingered between life and death; and, while in this condition, his friends despairing of his recovery, and his father, whose heart yearned over him, watching his enfeebled frame, seemingly nigh to dissolution, the apparently dying boy turned his large, full eyes upon his father's face, and, in an almost inaudible whisper, begged that, if he recovered, he might be allowed to go to

Hampton Academy, and prepare to become a teacher. Was not this, indeed, an example of "the ruling passion strong in death?" The father could not refuse the request proffered at such a time; what father could? The boy did recover, and he did go to the academy, a plain farmer's boy; he dressed in plain farmer's clothes, and hence, some self-conceited puppies, whose more fashionable exterior could not hide the meanness of their souls, deemed him fit subject for their gibes and sneers; but his earnest nature, and his intense love of study were not to be thwarted by such rebuffs; he pursued the even tenor of his way, and, having spent some months at the academy, he taught a district school for the ensuing winter, and then returned again to the academy. Here his progress in study was rapid; but, the ensuing winter, we find him again teaching in his native town, and his further studies were prosecuted without assistance. The next winter he had determined to make teaching a profession, and accordingly, having taught a district school at Newbury, Mass., during the winter, at its close he opened a private school; a daring step for a young man but nineteen years of age, and who had enjoyed so few advantages of education, but the success which followed fully justified the self-reliance which led him to attempt it. At the beginning he had five pupils, but he persevered, and before the close of the term, the number he had contemplated was full. Here, as every where else, during his career as a teacher, was manifested that diligence, industry, and careful preparation for his duties, which made him so eminently successful. He studied the lessons he was to teach, thoroughly, that he might impart instruction with that freshness and interest which such study would give; he studied his scholars, thoroughly, that he might adapt his teachings to their several capacities, encouraging the diffident and sluggish, restraining the forward, and rousing the listless and careless to unwonted interest and energy; he studied, too, their moral natures, and sought to wake in their youthful hearts aspirations for goodness and purity; and he studied whatever would enlarge his sphere of thought, intelligence, and professional usefulness.

Such a teacher was sure to rise in reputation; slowly, perhaps, but certainly, and hence it need not surprise us to learn that, within two years, he was associate principal of the Newburyport High School, having charge of the English department. Here, for twelve years, he was associated with Roger S. Howard, Esq., one of the most eminent teachers in Massachusetts, and how well he fulfilled his duties, Mr. Howard, who survived him, testifies. The same intense fondness for study characterized him, leading him to acquire a very competent knowledge of the Latin language, and something of the Greek; the

same earnest and conscientious performance of all his school duties, and delight in them, was manifested here as in his humbler position. It was while occupying this post, that he first began to come before the public as a lecturer. He was an active and prominent member of the Essex County Teachers' Association, one of the most efficient educational organizations in Massachusetts, and delivered before that body several lectures, which Hon. Horace Mann characterized as the best ever delivered before that or any other body. Of one of these, on "*The Mutual Duties of Parents and Teachers*," six thousand copies were printed and distributed (3000 of them at Mr. Mann's expense,) throughout the state. Mr. Page's powers as an orator and debater, were of a very high order; he possessed, says Mr. Mann (himself an orator of no mean powers,) "that rare quality, so indispensable to an orator, *the power to think, standing on his feet, and before folks.*" As a teacher, he exhibited two valuable qualifications; the ability to turn the attention of his pupils to the principles which explain facts, and in such a way that they could see clearly the connection; and the talent for reading the character of his scholars, so accurately, that he could at once discern what were their governing passions and tendencies, what in them needed encouragement and what repression. Thus, useful, active, and growing in reputation, Mr. Page remained at Newburyport till December, 1844.

In the winter preceding, the legislature of New York, wearied with the costly, but unsuccessful measures which, year after year, had been adopted for the improvement of her public schools, had appointed a committee of its own body, warm friends of education, to visit the normal schools of Massachusetts, and make a report thereon. The committee attended to their duties, and made an elaborate report in favor of the adoption of the normal school system. That report was adopted, and an appropriation of ten thousand dollars outfit, and ten thousand dollars per annum for five years, was voted, to establish a normal school, as an experiment. The friends of education in New York felt that, liberal as this appropriation was, every thing depended upon securing the right *man* to take charge of it, and long and carefully did they ponder the question, who that man should be. Mr. Page's reputation had already outrun the town and the county in which he resided; and, on the recommendation of Hon. Horace Mann, and other friends of education in Massachusetts, Prof. (afterward Bishop,) Potter, Col. Young, and other members of the committee, entered into correspondence with him, on the subject. In reply to the first communication, he addressed numerous inquiries to the committee, concerning the plan proposed for the organization and management of the school.

These questions were so pointed, and so well chosen, that Col. Young, on hearing them, at once exclaimed, "That is the man we need," and expressed himself entirely satisfied, without any further evidence. So cautious, however, were the committee, that it was decided that, before closing the negotiation, Dr. Potter should visit Newburyport, and have a personal interview with Mr. Page. He accordingly repaired thither, called at Mr. Page's residence, and found him in his every-day dress, and engaged in some mechanical work connected with the improvement of his dwelling. An interview of a single half hour so fully prepossessed him with Mr. Page's personal bearing and conversation, that he at once closed the negotiations with him, and secured his services as principal of the New York State Normal School.

Mr. Page closed his connection with the Newburyport High School about the middle of December, 1844; not without numberless demonstrations of regret and affectionate regard on the part of his pupils and friends. While on his way to Albany, he spent a night with Mr. Mann, in Boston, and the new duties he was about to undertake, the obstacles and difficulties, the opposition and misrepresentations he would meet, and the importance and necessity of success, formed themes of converse which occupied them till the early morning hours; in parting, Mr. Mann said to Mr. Page, as a veteran commander might have said to a youthful officer going to lead a forlorn hope, "SUCCEEDED OR DIED." The words sank deep into his heart; they were adopted as his motto in the brief but brilliant career which followed; and once, on recovering from a dangerous illness, he reminded his friend of his injunction, and added, "I thought I was about to fulfill the last alternative." He arrived at Albany a few days before the commencement of the "experiment," as the normal school was designated, and found every thing in a chaotic state; the rooms intended for its accommodation, yet unfinished; there was no organization, no apparatus, and indeed very few of the appliances necessary to a successful beginning; while the few were hoping, though not without fear, for its success, and the many were prophesying its utter failure. From this chaos, the systematic mind of Mr. Page soon evolved order; full of hope, and confident of the success of the normal school system, himself, he infused energy and courage into the hearts of its desponding friends, and caused its enemies to falter, as they saw how all obstacles yielded to the fascination of his presence, or the power of his will. The school commenced with twenty-five scholars, but ere the close of its first term, the number had increased to one hundred. At the commencement of the second term, two hundred assembled for instruction. From this time its course was onward; every term

increased its popularity; and the accommodations provided for it, large as they were, were soon crowded. For the first three years it had to contend with numerous and unscrupulous foes; some of whom attacked the system, others its practical workings, others still, who were strangers to his person, attacked the character of the principal of the school. Meantime, Mr. Page labored indefatigably; against the assaults upon the organization, or its practical operations, he interposed able, manly, and courteous defenses; those which were leveled at himself, he bore in silence; but no man, whatever his position in the state, and however bitter might have been his hostility to the school, or to its principal, ever came within the magnetism of his presence and influence, without being changed from an enemy to a friend. Among the most decided, as well as the most conscientious opposers of the normal school, was the Hon. Silas Wright; indeed, in his election as governor, the enemies of the school claimed a triumph, and counted largely on his eminent abilities to aid them in putting it down; but a very few months' residence in Albany converted this man, of strong and determined will, into one of its sincerest friends. During the vacations of the school, Mr. Page gave himself no rest; he visited different parts of the state, attended teachers' institutes, lectured day after day, and, wherever he went, removed prejudices, cleared up doubts, and won golden opinions. Every such visit drew a large number of pupils to the school from the section visited the ensuing term. The state superintendent was accustomed to say, "that he needed only to look at the catalogue of the normal school to tell where Mr. Page had spent his vacations."

Before four years had passed, the school had ceased to be an "experiment;" it was too firmly rooted in the hearts of the people to be abandoned, and the opposition, which had at first been so formidable, had dwindled into insignificance. But the toil requisite to accomplish this, had been too arduous for any constitution, however vigorous, to endure. The autumnal term of 1847 found him cheerful and hopeful as ever, but with waning physical strength; he sought (an unusual thing for him,) the aid of his colleagues in the performance of duties he had usually undertaken alone, and at length consented to take a vacation of a week or two during the Christmas holidays. Alas! the relaxation came too late; the evening before he was to leave, there was a meeting of the faculty at his residence; he was cheerful, but complained of slight indisposition, and retired early. With the night, however, came violent fever, and restlessness, and by the morning light, the physicians in attendance pronounced the disease pneumonia. At first the attack excited little alarm, but it soon

became evident that his overtasked vital powers had not the ability to resist the violence of the disorder. On the fourth day, he expressed to a friend his conviction that he should not recover. The severity of the disease soon increased, and, on the morning of January 1st, 1848, he passed away.

Six months before his death, he had, in company with one of his colleagues, made a brief visit to his former home, at Newburyport; and, while visiting the beautiful cemetery there, he stopped suddenly near a shady spot, and said, "here is where I desire to be buried." The sad funeral train which bore the clay that once had been his earthly habitation, from Albany to Newburyport, laid it sadly, yet hopefully, in that quiet nook, to repose till the archangel's trumpet shall be heard, and the dead be raised.

His life had been short, as men count time; he lacked six months of completing his thirty-eighth year when he was summoned to the better land; but, if life be reckoned by what is accomplished, then had his life been longer far than that of the antediluvian patriarchs. Of the hundreds of teachers who were under his care at Albany, there was not one who did not look up to him with admiration and love; not one who did not bear, to some extent, at least, the impress of his character and influence; and, it is doing no injustice to those who have so worthily succeeded him, to say that a very large part of the progress which the Empire State has made in the cause of education, during the past ten years, has been from the reflex influence of his spirit and teachings upon those who were his pupils. Nor is this influence confined to New York; other states feel it; even now, men, who were trained under him at Albany, are occupying high positions in the cause of education in several of the Western States; and gifted women, who, under his teachings, were moved to consecrate themselves to the holy duty of training the young, are now at the head of seminaries and female schools of high order, extending his influence in widening circles over the boundless prairies of the West.

Our brief narrative exhibits, we think, clearly what were the marked traits of Mr. Page's character; industry, perseverance, decision, energy, great executive ability, ready tact, and conscientious adherence to what he regarded as duty. But no language can describe the fascination of his manner, the attraction of his presence, his skill in what he was accustomed to call the *drawing-out* process, or his tact in making all his knowledge available. His familiar lectures to his pupils on subjects connected with the teacher's life and duties, could they be published, would form an invaluable hand-book for

teachers. He possessed, beyond most men, the happy talent of *always saying the right thing at the right time*. In personal appearance, Mr. Page was more than ordinarily prepossessing,—of good hight and fine form, erect and dignified in manner, scrupulously neat in person, and easy in address, he was a living model to his pupils, of what a teacher should be. Aside from a few lectures, published at different times, to some of which we have already alluded, Mr. Page left but one published work,—“*The Theory and Practice of Teaching*,” a work which has had a large circulation, and one which no teacher can afford to be without.

As evidence of the estimation in which Mr. Page was held by the distinguished teachers with whom he had been associated, we subjoin a portion of the addresses made on the subject, at the meeting of the American Institute of Instruction, on the announcement of his death.

Mr. Gideon F. Thayer said Mr. Page possessed a clear and logical mind, a sound judgment, and remarkable powers of discrimination; decision and firmness for all occasions, unwavering integrity, and a fearless exercise of his own rights without infringing on the rights or wounding the sensibilities of others. Dignity, affability, and courtesy, were so beautifully blended in his manners, as to secure respect and conciliate regard.

He began to teach when quite young, and, struggling with difficulties, neither few nor small, arose at last, through various important grades, to the highest rank in his profession,—being, at the time of his death, the principal of the state normal school, in the capital of New York. And although he had to encounter distrust and opposition, on assuming this extremely responsible charge, he, in a short period of time, lived down these obstacles, which a blind prejudice against the institution had generated, and died,—if not without an enemy,—leaving a multitude of devoted and sorrowing friends.

The secret of his success was found in the characteristics above mentioned, in his thorough conscientiousness, his religious principle, his fidelity in duty, connected with his self-faith, his diligence, and his indomitable will. He felt that he *could*,—he *resolved*,—he *conquered*!

He was a man of genuine modesty, and felt, to the day of his death, not as though he had fully attained and were already perfect; but constantly strove for additional acquisitions to the very liberal stock which his industry and perseverance had secured to him.

The last time I had the pleasure of seeing him, was in November, 1847, when, in a discussion upon the value of the study of the classics, he intimated that he had become somewhat familiar with the Latin, but had not made much progress in the Greek. “I intend, however,” he added with enthusiasm, “to master that too, within the coming year, if my life is spared.” Alas that the condition could not be fulfilled!

He thus filled up the measure of his life; not only in term-time, when the labors of his school occupied his mind and called for all his energies; but, in his vacations, when his exhausted powers demanded relaxation, he was still in harness, visiting schools, institutes, and conventions of teachers, throughout the broad surface of the Empire State; teaching, lecturing, and aiding those who needed his efficient assistance in the great work of common school education. To these supererogatory labors is to be attributed his early decline; he became the victim of excessive mental and bodily toil; sacrificing his life to his insatiable desire to benefit his race.

In debate, Mr. Page was able, candid, and forcible. He was blessed with a noble figure, a manly bearing, and great personal comeliness; all which were lighted up and adorned by an intelligence that flashed from his fine eye and beamed from the lineaments of his countenance; while a voice of much compass and

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sweetness added its charm, and completed the outline of a most accomplished and eloquent orator.

His labors among us in this Institute, were of the most valuable kind. Among the lectures which he delivered to us, was one on the reciprocal duties of parents and teachers, six thousand copies of which were printed and distributed over the land; doing good to all parties interested, and furnishing lessons of wisdom, which will continue to bless the age, though their author has passed to his high reward.

This, and his larger work, will now be more dearly cherished, since his task on earth is finished; and will, as we trust, be a means of inciting multitudes to enlightened and judicious action, in the great work of training the child for his heavenly destiny.

In conclusion, the speaker said he would not enlarge on the character of the deceased. It was too well known to need his feeble eulogium. It was written in letters of living light on the walls of the various institutions, with which the deceased had been connected. It was impressed in ineffaceable lines on the tablets of the hearts of those who knew him, and especially of those whose early steps in the path of knowledge and virtue he had led with parental solicitude, and of his more recent pupils, prepared, by his instruction and wise counsel, for the duties of the teacher's vocation.

He would, therefore, by the permission of the chair, offer, for the adoption of the Institute, the following resolutions.

Resolved, That, in the demise of DAVID P. PAGE, the cause of education has lost an efficient friend, our fraternity an able and faithful coadjutor, and the community a member devoted to its highest and most sacred interests.

Resolved, That, while this Institute laments the bereavement of a warmly-esteemed and most worthy brother, its members will not cease to cherish the remembrance of his high aims, his spotless life, his reverence for religion, his singular devotion to the cause of man, and his consequent success and triumph over the difficulties of his vocation.

Resolved, That we hold the life and character of Mr. Page as a valuable legacy to the teacher, the citizen, and the philanthropist; and feeling that, though dead, he yet speaketh, we will endeavor to make his example a model for our imitation, as teachers, as men, and as citizens.

Resolved, That we deeply sympathize with the family of the deceased in this irreparable loss, and that a copy of these resolves be transmitted to the afflicted widow.

Resolved, That these resolutions be entered upon the records of the Institute.

Mr. Wm. H. Wells said, as a citizen of Newburyport, the field of Mr. Page's labors for several years previous to his removal from Massachusetts, I beg leave to offer a word in relation to the resolutions before us.

To the teachers of Essex County, the name of Mr. Page is a term of deep and solemn interest. We loved Mr. Page sincerely while living; and we now cherish a most affectionate regard for his memory. He advanced rapidly in our midst, from the humble charge of a district school, to such a degree of eminence and reputation in his profession, that we were unable to retain his services among us.

In rising to eminence himself, Mr. Page did much to honor and elevate the profession to which his life was devoted. Truly, a standard-bearer has fallen, and every teacher in the land has lost a sincere and devoted friend. England will as soon find another Thomas Arnold, as America another David P. Page.

We introduce the following as specimens of Mr. Page's method of illustrating different processes of teaching.

POURING-IN PROCESS.

This consists in *lecturing* to a class of children upon every subject which occurs to the teacher, it being his chief aim to bring before them as many facts in a limited time as possible. It is as if he should provide himself with a basket of sweetmeats, and every time he should come within reach of a child, should seize him, and compel him to swallow—regardless of the condition of his stomach—whatever trash he should happen first to force into his mouth. Children are indeed fond of sweetmeats, but they do not like to have them *administered*—and every physiologist knows there is such a thing as eating enough, even of an agreeable thing, to make one sick, and thus produce loathing forever after. Now many teachers are just such misguided caterers for the mind. They are ready to seize upon the *victims* of their kindness, force open their mental gullets, and pour in, without mercy and without discretion, whatever sweet thing they may have at hand, even though they surfeit and nauseate the poor sufferer. The mind, by this process, becomes a mere *passive recipient*, taking in without much resistance whatever is presented, till it is full.

"A passive recipient!" said one to his friend, "what is a *passive recipient*?" "A passive recipient," replied his friend, "is a *two-gallon jug*. It holds just two gallons, and, as it is made of potters' ware, it can never hold but just two gallons." This is not an unfit illustration of what I mean by making the mind a passive recipient. Whenever the teacher does not first excite inquiry, first prepare the mind by *waking it up* to a desire to know, and, if possible, to find out by itself, but proceeds to think *for* the child, and to give him the results, before they are desired, or before they have been sought for—he makes the mind of the child a *two-gallon jug*, into which he may pour just *two gallons*, but no more. And if, day after day, he should continue to pour in, day after day he may expect that what he pours in will *all run over*. The mind, so far as retention is concerned, will act like the jug; that is, a part of what is poured in to-day will be diluted by a part of that which is forced in to-morrow, and that again will be partially displaced and partially mingled with the next day's pouring, till, at length, there will be nothing characteristic left. But, aside from retention, there is a great difference between the jug and the mind. The former is inert material, and may be as good a jug, after such use, as before. But the mind suffers by every unsuccessful effort to retain.

This process of lecturing children into imbecility is altogether too frequently practiced; and it is to be hoped that intelligent teachers will pause and inquire, before they pursue it further.

The other process to which I wish to call attention, is that which, for the sake of distinguishing it from the first, I shall denominate the

DRAWING-OUT PROCESS.

This consists in asking what the lawyers call *leading questions*. It is practiced, usually, whenever the teacher desires to help along the pupil. "John," says the teacher, when conducting a recitation in Long Division, "John, what is the number to be divided called?" John hesitates. "Is it the dividend?" says the teacher. "Yes, sir; the dividend." "Well, John, what is that which is left, after dividing, called?—the remainder—is it?" "Yes, sir." A visitor now enters the room, and the teacher desires to show off John's talents. "Well, John, of what denomination is the remainder?"

John looks upon the floor.

"Is n't it always the same as the dividend, John?"

"Yes, sir."

"Very well, John," says the teacher, soothingly, "what denomination is this dividend?" pointing to the work on the board. "Dollars, is it not?"

"Yes, sir; dollars."

"Very well; now what is this remainder?"

John hesitates.

"Why, *dollars* too, is n't it?" says the teacher.

"Oh yes, sir, *dollars!*" says John, energetically, while the teacher complacently looks at the visitor, to see if he has noticed how *correctly* John has answered!

A class is called, to be examined in history. They have committed the text-book to memory; that is, they have learned the *words*. They go on finely for a time. At length one hesitates. The teacher adroitly asks a question in the language of the text. Thus: "*Early in the morning, on the 11th of September, what did the whole British army do?*" The pupil, thus timely reassured, proceeds: "*Early in the morning, on the 11th of September, the whole British army, drawn up in two divisions, commenced the expected assault.*" Here again she pauses. The teacher proceeds to inquire: "Well—'Agreeably to the plan of Howe, the right wing' did what?"

Pupil. "*Agreeably to the plan of Howe, the right wing*"—

Teacher. "*The right wing, commanded by whom?*"

Pupil. "Oh! '*Agreeably to the plan of Howe, the right wing, commanded by Knyphausen, made a feint of crossing the Brandywine, at Chad's Ford,*'" &c.

This is a very common way of helping a dull pupil out of a difficulty; and I have seen it done so adroitly, that a company of visitors would agree that it was wonderful to see how thoroughly the children had been instructed!

I may further illustrate this *drawing-out* process, by describing an occurrence, which, in company with a friend and fellow-laborer, I once witnessed. A teacher, whose school we visited, called upon the class in Colburn's First Lessons. They rose, and in single file marched to the usual place, with their books in hand, and stood erect. It was a very good-looking class.

"Where do you begin?" said the teacher, taking the book.

Pupils. On the 80th page, third question.

Teacher. Read it, Charles.

Charles. (*Reads.*) "A man, being asked how many sheep he had, said that he had them in two pastures; in one pasture he had eight; that three-fourths of these were just one-third of what he had in the other. How many were there in the other?"

Teacher. Well, Charles, you must first get one-fourth of eight, must you not?

Charles. Yes, sir.

Teacher. Well, one-fourth of eight is two, is n't it?

Charles. Yes, sir; one-fourth of eight is two.

Teacher. Well, then, three-fourths will be three times two, won't it?

Charles. Yes, sir.

Teacher. Well, three times two are six, eh?

Charles. Yes, sir.

Teacher. Very well. (A pause.) Now the book says that this six is just one-third of what he had in the other pasture, do n't it?

Charles. Yes, sir.

Teacher. Then, if six is one-third, three-thirds will be—three times six, won't it?

Charles. Yes, sir.

Teacher. And three times six are—eighteen, ain't it?

Charles. Yes, sir.

Teacher. Then he had eighteen sheep in the other pasture, had he?

Charles. Yes, sir.

Teacher. Next; take the next one.

At this point I interposed, and asked the teacher if he would request Charles to go through it alone. "Oh, yes," said the teacher, "Charles, you may do it again." Charles again read the question, and—looked up. "Well," said the teacher, "You must first get one-fourth of eight, must n't you?" "Yes, sir." "And one-fourth of eight is two, is n't it?" "Yes, sir." And so the process went on as before, till the final eighteen sheep were *drawn out* as before. The teacher now looked round, with an air which seemed to say, "Now, I suppose you are satisfied."

"Shall I ask Charles to do it again?" said I. The teacher assented. Charles again read the question, and again—looked up. I waited, and he waited;—but the teacher could not wait. "Why, Charles," said he, impatiently; "you want one-fourth of eight, don't you?" "Yes, sir," said Charles, promptly; and I

thought best not to insist further at this time upon a repetition of "yes, sir," and the class were allowed to proceed in their own way.

This is, indeed, an extreme case; and yet it is but a fair sample of that teacher's method of stupefying mind. This habit of assisting the pupil, to some extent, is, however, a very common one, and as deleterious to mind as it is common. The teacher should at once abandon this practice, and require the scholar to *do the talking* at recitation. I need hardly suggest that such a course of *extraction* at recitation, aside from the waste of time by both parties, and the waste of strength by the teacher, has a direct tendency to make the scholar miserably superficial. For why should he study, if he knows from constant experience that the teacher, by a leading question, will relieve him from all embarrassment? It has often been remarked, that "the teacher makes the school." Perhaps in no way can he more effectually make an inefficient school, than by this *drawing-out process*.

I look upon the two processes just described, as very prominent and prevalent faults in our modern teaching; and if, by describing them thus fully, I shall induce any to set a guard upon their practice in this particular, I shall feel amply rewarded.

THE MORE EXCELLENT WAY.

It is always a very difficult question for the teacher to settle, "How far shall I help the pupil, and how far shall the pupil be required to help himself?" The teaching of nature would seem to indicate that the pupil should be taught mainly to depend on his own resources. This, too, I think is the teaching of common sense. Whatever is learned, should be so thoroughly learned, that the next and higher step may be comparatively easy. And the teacher should always inquire, when he is about to dismiss one subject, whether the class understand it so well that they can go on to the next. He may, indeed, sometimes give a word of suggestion during the preparation of a lesson, and, by a seasonable hint, save the scholar the needless loss of much time. But it is a very great evil, if the pupils acquire the habit of running to the teacher, as soon as a slight difficulty presents itself, to request him to remove it. Some teachers, when this happens, will send the scholar to his seat with a reproof perhaps; while others, with a mistaken kindness, will answer the question, or solve the problem themselves, as the shortest way to get rid of it. Both these courses are, in general, wrong. The inquirer should never be frowned upon; this may discourage him. He should not be relieved from labor, as this will diminish his self-reliance without enlightening him; for whatever is done *for* a scholar, without his having studied closely upon it himself, makes but a feeble impression upon him, and is soon forgotten. The true way is, neither to discourage inquiry nor answer the question. Converse with the scholar a little as to the principles involved in the question; refer him to principles which he has before learned, or has now lost sight of; perhaps call his attention to some rule or explanation before given to the class; go just so far as to enlighten him a little, and *put him on the scent*, then leave him to achieve the victory himself. There is a great satisfaction in discovering a difficult thing for one's self—and the teacher does the scholar a lasting injury, who takes this pleasure from him. The teacher should be simply suggestive, but should never take the glory of a victory from the scholar, by doing his work for him; at least, not until he has given it a thorough trial himself.

The skill of the teacher, then, will be best manifested, if he can contrive to awaken such a spirit in the pupil, that he shall be very unwilling to be assisted; if he can kindle up such a zeal, that the pupil will prefer to try again and again before he will consent that the teacher shall interpose. I shall never forget a class of boys, some fourteen or fifteen years of age, who, in the study of algebra, had imbibed this spirit. A difficult question had been before the class a day or two, when I suggested giving them some assistance. "*Not to-day, sir,*" was the spontaneous exclamation of nearly every one. Nor shall I forget the expression that beamed from the countenance of one of them, when, elated with his success, he forgot the proprieties of the school, and audibly exclaimed, "*I've got it! I've got it!*" It was a great day for him; he felt, as he never before had felt, his own might. Nor was it less gratifying to me, to find that his fellows were still unwilling to know his method of solution. The next day a large number brought a solution of their own, each showing evidence of originality. A class

that has once attained to a feeling like this, will go on to educate themselves, when they shall have left the school and the living teacher.

As to the communication of knowledge, aside from that immediately connected with school-studies, there is a more excellent way than that of *pouring it in* by the process already described. It is but just that I should give a specimen of the method of doing this. I shall now proceed to do so, under the head of

WAKING UP MIND.

The teacher of any experience knows that, if he will excite a deep and profitable interest in his school, he must teach many things besides *book-studies*. In our common schools, there will always be a company of small children, who, not yet having learned to read understandingly, will have no means of interesting themselves, and must depend mainly upon the teacher for the interest they take in the school. This, to them, is perhaps the most critical period of their lives. Whatever impression is now made upon them will be enduring. If there they become disgusted with the dullness and confinement of school, and associate the idea of pain and repulsiveness with that of learning, who can describe the injury done to their minds? If, on the other hand, the teacher is really skillful, and excites in them a spirit of inquiry, and leads them in suitable ways to observe, to think, and to feel, that the school is a happy place even for children, it is one great point gained.

I may suggest here, then, that it would be well to set apart a few minutes once a day, for a *general exercise* in the school; when it should be required of all to lay by their studies, assume an erect attitude, and give their undivided attention to whatever the teacher may bring before them. Such a course would have its physiological advantages. It would relieve the minds of all for a few minutes. The erect attitude is a healthful one. It would also serve as a short respite from duty, and thus refresh the older scholars from study. I may further add, that, for the benefit of these small children, every general exercise should be conducted with reference to *them*, and such topics should be introduced as they can understand.

It is the purpose of the following remarks to give a *specimen* of the manner of conducting such exercises, for a few days, with reference to *waking up mind* in the school, and also in the district.

Let us suppose that the teacher has promised that, on the next day, at ten minutes past ten o'clock, he shall request the whole school to give their attention five minutes, while he shall bring something there to which he shall call the attention, especially of the little boys and girls under seven years of age. This very announcement will excite an interest both in school and at home; and when the children come in the morning, they will be more wakeful than usual till the fixed time arrives. It is very important that this time should be fixed, and that the utmost punctuality should be observed, both as to the beginning and ending of the exercise at the precise time.

The teacher, it should be supposed, has not made such an announcement without considering what he can do when the time arrives. He should have a well-digested plan of operation, and one, which he knows beforehand, that he can successfully execute.

Let us suppose that, in preparing for this exercise, he looks about him to find some object which he can make his *text*; and that he finds upon his study-table an *ear of corn*. He thinks carefully what he can do with it, and then, with a smile of satisfaction, he puts it in his pocket for the "general exercise."

In the morning he goes through the accustomed duties of the first hour, perhaps more cheerfully than usual, because he finds there is more of animation and wakefulness in the school. At the precise time, he gives the signal agreed upon, and all the pupils drop their studies and sit erect. When there is perfect silence and strict attention by all, he takes from his pocket the ear of corn, and in silence holds it up before the school. The children smile, for it is a familiar object; and they probably did not suspect they were to be *fed* with corn.

Teacher. "Now, children," addressing himself to the youngest, "I am going to ask you only one question to-day about this ear of corn. If you can answer it, I shall be very glad; if the little boys and girls upon the front seat can not give the answer, I will let those in the next seat try; and so on, till all have tried, unless our time should expire before the right answer is given. I shall not be sur-

prised if none of you give the answer I am thinking of. As soon as I ask the question, those who are under seven years old, that think they can give an answer, may raise their hand. WHAT IS THE EAR OF CORN FOR?"

Several of the children raise their hands, and the teacher points to one after another, in order, and they rise and give their answers.

Mary. It is to feed the geese with.

John. Yes, and the hens too, and the pigs.

Sarah. My father gives corn to the cows.

By this time the hands of the youngest scholars are all down, for, having been taken a little by surprise, their knowledge is exhausted. So the teacher says that those between seven and ten years of age may raise their hands. Several instantly appear. The teacher again indicates, by pointing, those who may give the answer.

Charles. My father gives corn to the horses, when the oats are all gone.

Daniel. We give it to the oxen and cows, and we fat the hogs upon corn.

Laura. It is good to eat. They shell it from the cobs, and send it to mill, and it is ground into meal. They make bread of the meal, and we eat it.

This last pupil has looked a little further into domestic economy than those who answered before her. But, by this time, perhaps before, the five minutes have been nearly expended, and yet several hands are up, and the faces of several are beaming with eagerness to tell their thoughts. Let the teacher then say, "We will have no more answers to-day. You may think of this matter till to-morrow, and then I will let you try again. I am sorry to tell you that none of you have mentioned the use I was thinking of, though I confess I expected it every minute. I shall not be surprised if no one of you give this answer to-morrow. I shall now put the ear of corn in my desk, and no one of you must speak to me about it till to-morrow. You may now take your studies."

The children now breathe more freely, while the older ones take their studies, and the next class is called. In order to success, it is absolutely necessary that the teacher should positively refuse to hold any conversation with the children on the subject, till the next time for "general exercise."

During the remainder of the forenoon, the teacher will very likely observe some signs of thoughtfulness on the part of those little children who have been habitually dull before. And, perhaps some child, eager to impart a new discovery, will seek an opportunity to make it known during the forenoon. "Wait to-morrow," should be the teacher's only reply.

Now let us follow these children as they are dismissed, while they bend their steps toward home. They cluster together in groups, as they go down the street, and they seem to be earnestly engaged in conversation.

"I do n't believe it has any other use," says John.

"Oh, yes, it has," says Susan; "our teacher would not say so, if it had. Besides, did you not see what a knowing look he had, when he drew up his hand, and said he guessed we could n't find it out?"

"Well, I mean to ask my mother," says little Mary; "I guess she can tell."

By and by, as they pass a field of corn, Samuel sees a squirrel run up the street, with both his cheeks distended with "plunder."

At home, too, the ear of corn is made the subject of conversation. "What is the ear of corn for, mother?" says little Mary, as soon as they have sat down at the dinner table.

Mother. An ear of corn, child? why, do n't you know? I have seen it on the fowls, and the pigs, and the cattle; and we make bread of it, too.

Mary. Yes, we told all that; but the teacher says that is not all.

Mother. The teacher?

Mary. Yes, ma'am; the teacher had an ear of corn at school, and he said what it was for; and, after we had told him every thing we could, he said there was another thing still. Now I want to find out, mother.

The consequence of this would be that the family—father, mother, brothers and sisters—would resolve themselves into a committee to find out the use of the ear of corn. The same, or something like this, would be the case in the district; and, by the next morning, several children would be able to communicate on the subject. The hour would pass with great interest, and the first signal would produce a great

The teacher now takes the ear of corn from the desk, and displays it before the school; and quite a number of hands are instantly raised, as if eager to be the first to tell what other use they have discovered for it.

The teacher now says, pleasantly: "The use I am thinking of, you have all observed, I have no doubt; it is a very important use indeed; but, as it is a little out of the common course, I shall not be surprised if you can not give it. However, you may try."

"It is good to boil!"* says little Susan, almost springing from the floor as she speaks.

"And it is for squirrels to eat," says little Samuel. "I saw one carry away a whole mouthful, yesterday, from the cornfield."

Others still mention other uses, which they have observed. They mention other animals which feed upon it, or other modes of cooking it. The older pupils begin to be interested, and they add to the list of uses named. Perhaps, however, none will name the one the teacher has in his own mind; he should cordially welcome the answer, if perchance it is given; if none should give it, he may do as he thinks best about giving it himself on this occasion. Perhaps, if there is time, he may do so—after the following manner:—

"I have told you that the answer I was seeking was a very simple one; it is something you have all observed, and you may be a little disappointed when I tell you. The use I have been thinking of for the ear of corn is this:—*It is to plant. It is for seed*, to propagate that species of plant called corn." Here the children may look disappointed, as much as to say, "we knew that before."

The teacher continues: "And this is a very important use for the corn; for if for one year none should be planted, and all the ears that grew the year before should be consumed, we should have no more corn. This, then, was the great primary design of the corn; the other uses you have named were merely secondary. But I mean to make something more of my ear of corn. My next question is:—*DO OTHER PLANTS HAVE SEEDS?*"†

Here is a new field of inquiry. Many hands are instantly raised; but, as the five minutes by this time have passed, leave them to answer at the next time.

"*Have other plants seeds?*" the children begin to inquire in their own minds, and each begins to think over a list of such plants as he is familiar with. When they are dismissed, they look on the way home at the plants by the roadside, and when they reach home, they run to the garden. At the table, they inquire of their parents, or their brothers and sisters.

At the next exercise, they will have more than they can tell in five minutes, as the results of their own observation and research. When enough has been said by the children, as to the plants which have seeds, the next question may be:—*DO ALL PLANTS HAVE SEEDS?* This question will lead to much inquiry at home, wherever botany is not well understood. There are many who are not aware that all plants have seeds. Very likely the ferns (common brakes,) will be noticed by the children themselves. They may also name several other plants which do not exhibit their apparatus for seed-bearing very conspicuously. This will prepare the way for the teacher to impart a little information. Nor is there any harm in doing so, whenever he is satisfied that the mind has been suitably exercised. The mind is no longer a "passive recipient;" and he may be sure that, by inquiry, it has increased its *capacity to contain*, and any fact which now answers inquiry, will be most carefully stored up.

The next question may be:—*DO TREES HAVE SEEDS?* As the children next go

*The children themselves will be sure to find some new answers to such questions as the above. In giving in substance this lecture to a gathering of teachers, in the Autumn of 1845, in one of the busy villages of New York, where, also, the pupils of one of the district schools were present, by invitation, I had described a process similar to that which has been dwelt upon above. I had given the supposed answers for the first day, and had described the children as pressing the question at home. When I had proceeded as far as to take up the ear of corn, the second day, and had spoken of the possibility that the true answer to the question might not be given, I turned almost instinctively to the class of children at my right, saying, "*Now what is the ear of corn for?*" A little boy, some six years of age, who had swallowed every word, and whose face glowed as if there was not room enough for his soul within him, bounded upon his feet, and forgetting the publicity of the place, and the gravity of the chairman of the meeting, clapping his hands forcibly together, "*It's to pop!*" he exclaimed emphatically, very much to the amusement of the audience. His mind had been *waked up*.

† *Plant* is here used in the popular sense.

out, their eyes are directed to the trees above them. The fruit-trees, the walnut, the oak, and perhaps the pine, will be selected as those which have seeds. They will, however, mention quite a number which do not, or which they think do not have seeds. Among these may be the elm, the birch, and the Lombardy poplar. After hearing their opinions, and the results of their observations, take one of their exceptions, as the subject of the next question:—*Does the elm have seeds?* This will narrow their inquiries down to a specific case, and every elm in the district will be inquired of as to its testimony on this point.

If the children can any of them collect and give the truth in the matter, so much the better; but if they, after inquiring of their parents and their grandparents, as I have known a whole school to do, come back, insisting that the elm has no seeds; after hearing their reasons for their belief, and perhaps the opinions of their parents, you may promise to tell them something about it at the next exercise. This will again awaken expectation, not only among the children but among the parents. All will wish to know what you have to bring out.

Great care should be taken not to throw any disparagement upon the opinions of parents. After giving the signal for attention, you may proceed as follows:—

"*Has the elm-tree any seeds?*" Perhaps, children, you may recollect, after the cold winter has passed away, that, along in the latter part of March, or the first of April, we sometimes have a warm, sunny day. The birds perhaps appear and begin to sing a little, and as you look up to the elm, you notice that its buds seem to swell, and you think it is going to put out its leaves. Every body says we are going to have an early spring. But, after this, the cold, frosty nights and windy days come on again, and then you think the leaves can not come out so early. Now, if you observe carefully, the leaves do not come out till about the 20th of May, or perhaps the 1st of June. Did you ever see any thing like what I have described?"

"Yes, sir; we remember that."

"Well, the next time you see the buds begin to open, just break off a twig of a good large tree, and you will find they are *not the leaf-buds*. But, if you will watch them carefully for two or three weeks, you will find that each bud will put out some beautiful little flowers, brightly colored, and slightly fragrant. If you will still continue to watch them, you will find, as the flowers fall off, that seed-vessels are formed, shaped very much like the parsnip seed. These will grow larger and larger every day, and by and by they will turn brown, and look as if they were ripe. Just about this time the leaves will come out; and soon after, these seeds, during some windy day or night, will all fall off. The ground will be covered with thousands of them. Perhaps you have seen this."

"Yes, sir," says John; "Grandpa calls that *elm-dust*."

"Perhaps next year you can watch this, and ask your parents to examine it with you. But the five minutes are ended."

Now, information thus communicated will never be forgotten. The mind, having been put upon the stretch, is no longer a *passive recipient*.

The next question:—How ARE SEEDS DISSEMINATED?—(of course explaining the term—"disseminated.")

This will bring in a fund of information from the pupils. They will mention that the thistle-seed *flies*, and so does the seed of the milkweed; that the burs of the burdock, and some other seeds, are provided with hooks, by which they attach themselves to the hair of animals or the clothing of men, and *ride* away to their resting-place, which may be a hundred miles off. Some fall into the water, and *sail* away to another shore. Some, like the seed of the touch-me-not, are thrown to a distance by the bursting of the elastic pericarp; others, as nuts and acorns, are carried by squirrels, and buried beneath the leaves. These facts would mostly be noticed by children, when once put upon observation.

Next question:—*Are plants propagated in any other way than by seeds?*

This question would call their attention to the various means of natural and artificial propagation, by layers, by offsets, by suckers, by grafting, by budding, &c.

Again:—*Have any plants more ways than one of natural propagation?* Some have one way only—by seeds, as the annual plants; some have two—by seeds, and by roots, as the potato; some have three—as the tiger-lily, by side-bulbs from the roots, by *stalk-bulbs*, and by the seeds. This can be extended indefinitely.

Let it be remembered that the above has been given *simply as a specimen of*

what could easily be done by an ingenious teacher, with as common a thing as an ear of corn for the text. Any other thing would answer as well. A chip, a tooth, or a bone of an animal, a piece of iron, a feather, or any other object, could be made the text for adroitly bringing in the *uses of wood*, the *food and habits of animals*, the *use and comparative value of metals*, the *covering of birds*, their *migration*, the *covering of animals*, &c., &c. Let the teacher but think what department he will dwell upon, and then he can easily select his text; and, if he has any tact, he can keep the children constantly upon inquiry.

The advantages of the above course are many and great.

1. *It immediately puts the minds of the children into a state of vigorous activity.* They feel that they are no longer *passive recipients*. They are incited to discover and ascertain for themselves. They are, therefore, profitably employed, both in and out of school; and, as a consequence, are more easily governed. A habit of observation is easily cultivated in them; and what an advantage is this for a child! It is almost unnecessary to remark that many people go through the world, without seeing half the objects which are brought within their reach. It would be the same to them if their eyes were half the time closed. If they travel through a country presenting the most beautiful scenery, or the most interesting geological features, they see nothing. They grow up, among all the wonders of God's works, amid all the displays of his wisdom, of his design, to no purpose. They study none of the plans of nature; and by all the millions of arrangements which God has made, to delight the eye, to gratify the taste, to excite the emotions of pleasure instead of pain, they are neither the happier nor the wiser. What a blessing, then, it is to a child, to put his mind upon inquiry; to open his eyes to observe what his Creator intended his intelligent creatures should behold, of his goodness, his wisdom, his power. And how far superior is he, who teaches a child to see for himself, and to think for himself, to him who sees and thinks for the child, and thus practically invites the pupil to close his own eyes, and grope in darkness through the instructive journey of life.

2. *It is of great service to the parents in the district, to have this waking-up process in operation.* Our children are sometimes our best teachers. Parents are apt to grow rusty in their acquirements, and it is, no doubt, one of the designs of providence, that the inquisitiveness of childhood should preserve them from sinking into mental inactivity. Who can hear the inquiries of his own child after knowledge, without a desire to supply his wants? Now it is right for the teacher to use this instrumentality to *wake up mind* in his district. Parents, by the course I have recommended, very soon become interested in these daily questions of the teacher; and they are often as eager to know what is the *next question* as the children are to report it. This course, then, will supply profitable topics of conversation at the fire-side, and very likely will encourage also the pursuit of useful reading. It will moreover soon awaken a deeper interest in the school, on the part of the parents. They will begin to inquire of one another as to this new measure; and when they find by conference that the feeling in this matter is becoming general, they will desire to visit the school, to witness this as well as the other operations of the teacher. This will secure parental co-operation; and thus, in every way, the influence of the school will be heightened. It is no small thing for a teacher to enlist the interest of his patrons in the success of his school; and this is the most happily done through the pupils themselves.

3. *It wakes up the teacher's own mind.* This is by no means the least important point to be gained. The teacher, by the very nature of his employment, by daily confinement in an unhealthy atmosphere, by teaching over and over again that with which he is quite familiar, by boarding with people who are inclined to be social, and by the fatigue and languor with which he finds himself oppressed every night, is strongly tempted to neglect his own improvement. There are but few who rise above this accumulation of impediments, and go on, in spite of them, to eminence in the profession. A large proportion of all who teach, rely upon the attainments with which they commence; and, in the course of two or three years, finding themselves behind the age, they abandon the employment. This is very natural. Any man who treads in a beaten track, like a horse in a mill, must become weary, however valuable the product may be which he *grinds out*. It is essential that he should keep his own interest awake by some exercise of his ingenuity, and that he should compel himself to be industrious by undertaking that which will absolutely demand study.



1848

Amos A. Phelps.

AMOS A. PHELPS, D.D.,
PRESIDENT OF THE AMERICAN BOARD OF
MISSIONS TO THE AMERICAN INDIANS.



Handwritten signature or text, possibly "H. H. H."

XII. WILLIAM F. PHELPS.

WILLIAM F. PHELPS, the first principal of the State Normal School of New Jersey, was born at Auburn, New York, on the 14th of February, 1822—the oldest of three sons. His parents were intelligent and in comfortable circumstances, and gave to their children such educational advantages as the times and their means could afford. He was accordingly sent to such imperfect district schools as were to be found, at that period, in his native state.

In consequence of the manifest incompetency of his teachers, and of the barren results which followed their work, Mr. Phelps was frequently led, even at an early age, to reflect upon the absurdity of their methods, and upon the unprofitable character of the instruction they attempted to impart. He went with the greatest aversion to his senseless tasks, and his want of progress convinced him of the fundamental errors which characterized the prevalent mode of teaching. It was evident that this mode was not at all adapted to the nature and wants of the mind, and hence it failed to secure its development and progress.

In 1834, the Auburn High School was established, under the auspices of a ripe scholar and intelligent teacher, Albert Metcalf, A. M., of Massachusetts. This school being liberally supplied with blackboards, philosophical and astronomical apparatus, and being under the management of a polished gentleman, as well as a most efficient, kind, and affectionate teacher, soon attained a high character; and Mr. Phelps was transferred to its more genial atmosphere. Its strict discipline and rigorous instruction made a deep impression upon his mind and heart. He, however, felt keenly the effects of early misdirection, and though he profited much by the lessons of the high school, yet some of the advantages of his new position were lost through the effects of the habits already formed. It was at the high school that the benefits of classification and method were first exhibited to his mind; and the genial influence of kindness and affection, as educational forces, were first made apparent. But this school was too far in advance of the times, and of the intelligence of the community, to be properly appreciated. The teacher, after struggling against fearful odds, overtaken and disheartened, fell a victim to his devotion, and died on the field of his usefulness. Nothing now remained

to our pupil but the old district school and its repulsive associations.

Several ineffectual attempts were made by the parents of Mr. Phelps to install him in a commercial position. For several years, therefore, his time was divided between the farm in summer, and the country district school in winter.

It was while a pupil in the latter, in the winter of 1838-39, that his father was strongly impressed, by the schoolmaster, with the belief that William was abundantly competent to keep school. Accordingly, after spending the summer of 1839 on the farm, he was warned, in the autumn of that year, that he must "take a school" during the following winter. The proposition struck him with amazement, and he objected and even protested; but was obliged to obey. It would not be worth while to describe his long-continued and disheartening efforts "to get a school," nor to praise the distrust, and in some cases, the contempt with which his application was frequently received by narrow-souled trustees. After weeks of mortifying effort, he at length found a school in a retired neighborhood. This school was distinguished for its unpromising antecedents. Its record was one of battles fought between teachers and taught. The last of these had resulted in the discomfiture of his immediate predecessor, and his expulsion from the premises. This was, therefore, his first school. The building was in a crossing, where four roads met, in a low and forbidding spot. The only means of reaching the door was through the carriage track in the middle of the roadway. The school-house was, in dimensions, about eighteen by twenty-two feet. It had an old worn-out stove in the center, and the forms, or writing desks around the room. Surrounding the stove were seats made of slabs, with holes at each end, the legs crossing each other, and protruding at least two inches above the upper surface. These seats were about two and a half feet high, and were intended for little children. These arrangements, with an old rickety table, and a few shelves at one end, for the children's clothing, completed the outfit of the school in respect of furniture.

In these quarters, Mr. Phelps "kept a school," with sixty pupils of all ages, sexes, grades, and conditions, for four months and a half. The only notable characteristic of this school, was a tolerable degree of order, secured by constant exertion, and by a sort of omnipresence on the part of the teacher. A good feeling was maintained among both pupils and parents, and the reputation of the schoolmaster was established in that district for all time. But one incident of a somewhat striking character occurred to relieve the monotony of the session.

There was one family in the vicinity distinguished for the ungovernable character of its children. One of these children having one day openly defied the authority of the teacher, chastisement was inflicted upon the offender, in accordance with the theory and the practice of those days, made and provided. As the parents had conscientious scruples against juvenile obedience, these being abundantly manifested in their home practice, much indignation was felt by them at the success of the teacher in reducing the child to subjection, by means of corporeal punishment. Accordingly, a complaint was made before a justice, and a warrant was issued for Mr. P.'s arrest. He was held for his appearance at court, to answer to the grave charge of assault and battery.

Being quite young, and exceedingly sensitive, with no experience in the terrors of the law, he concluded that his character was lost irreparably. But the people of the district rallied to his support, rejoiced at his conquest of one of the barbarians, and the master's confidence was quickly restored. The complainant dared not go to the grand jury, and the prosecution dropped. The affair was, on the whole, a fortunate one for the neighborhood, and resulted in securing a wholesome state of subordination among its young ungovernables.

An incident of a more amusing character occurred during this first winter's experience in the life of a country schoolmaster. A certain family, residing a mile and a half from the school-house, and sending six children to the school, used to pack them all, young and old, into what is called a jumper, which consists of a crockery crate mounted upon a pair of runners, and in this plight they were sent to school. The horse was stabled at a neighbor's, and at night the precious freight was returned to the bosom of the family. It was the uniform practice then, as now in many quarters, for the teacher "to board around." It fell to Mr. Phelps' lot to be one of this lively sleighing party at night, during a part of that winter. In the morning he was obliged to make his way back to the school on foot, make the fire, and sweep the school-room, in order to be ready for the day's work by nine o'clock. We will permit him to describe his first visit to this family, in his own sprightly language, as communicated some time since, in a letter to the writer of this sketch. He says:—

"I never shall forget my first trip with this (the sleighing) party, nor my first meal with the family. There were seven children in all, and at home they were the most noisy and unmannerly set of urchins on this side of that mythical land, classically denominated 'bedlam.' Their voices, loud enough to startle the seven sleepers, could easily be heard across the street, when the house was closed. The mother

was one of the most industrious and tidy housekeepers I have ever met. With her shrill voice sounding above the clatter and confusion of the seven children, there was music such as would never soothe a nervous man to rest.

"Arriving at the house, we found a warm dinner 'smoking upon the table,' and it was not long before a general rush was made by the children, on some magic signal which I neither saw nor heard, for the gustatory onslaught. Being a stranger and somewhat diffident, I waited for an invitation to join in the work of destruction. At length the 'gude wife' spoke out in her highest key, and commanded me to 'come to the table.' A blessing was asked by the 'pater familias,' in a tone so low that I could scarcely distinguish a word, although sitting next him on the right. The last word was not uttered, before six forks went playing into a huge dish of potatoes, and thence, 'quick as thought,' into a plate of sliced ham, while the bread and other accompaniments disappeared as the dew before the sun of a summer morning. Here my modest reserve was again put to the test! I waited to be helped. Vain expectation! Desolate prospect for a half-starved schoolmaster! But the mother soon came to my relief, and in an instant, by a masterly stroke, she vanquished the accumulated bashfulness of seventeen years. Again, raising her voice to its highest pitch, she exclaimed, 'come now, you must help yourself. If you don't, you'll fare hard, for we haint got any manners here!' The thing was done. I at once 'fell to,' and helped myself; felt at home, and ever after, amidst all my experience in the barbarous practice of 'boarding round,' managed to adapt myself to the company I was in, and to keep my poor body several degrees above the point of starvation."

The succeeding summer was spent in the Auburn Academy, then under the charge of a very efficient corps of teachers. For several successive winters, Mr. Phelps taught district schools, often in retired neighborhoods, and amid discouraging circumstances. His plan was to teach in winter, and attend the academy in the summer, with a view to prepare for college. His success was uniformly marked, and he succeeded in securing the reputation of being one of the best teachers in the country. He became gradually impressed with the great utility of the blackboard, and his experience gave him more and more insights into the nature of the teacher's work, and the true dignity of his calling.

After an experience of five years as a teacher in the rural districts, Mr. Phelps was called upon to take charge of a large public school in the city of Auburn. This was a trying position. The buildings

were old, dilapidated, and inconvenient. There was but one room for the accommodation of one hundred and forty pupils of all grades. While the furniture, and other needful appliances for instruction and training, were of the most meager and unsatisfactory character.

While engaged in the conduct of this school, Mr. Phelps received notice of his appointment, by the county board of supervisors, as one of the first representatives to the New York State Normal School, which was opened in December, 1844. His impressions, gathered from the glowing accounts presented by the official descriptions of foreign normal schools, their comprehensive courses of study, their rigorous discipline, and their practical methods of training, were that they were far superior to our colleges, and believing that his native state, with her great resources and liberal educational policy, would not be found behind even the governments of Prussia, Switzerland, and France, in the endowment of her normal school, he at once gave up all thought of college, and enlisted in the new movement with all the enthusiasm of a Columbus, on his first voyage of discovery.

On the 16th of December, 1844, he for the first time took leave of his friends, and made his way to Albany, in order to be present at the opening of the school, which occurred on the 18th. The emotion which he felt on his first interview with such men as Samuel Young, Alonzo Potter, David P. Page, and Francis Dwight, was one of the greatest veneration. Noble men! They have all, with one exception, passed away, having sealed with their lives their devotion to the great cause of universal education and of human progress.

The school was opened, according to notice, on the 18th. Col. Young, who was then state superintendent of common schools, and chairman of the executive committee of the normal school, gave a lucid and able exposition of its nature and objects. Immediately thereafter, the exercises of the institution were commenced by Mr. Page, in that quiet and unpretending style so eminently his characteristic. There were but twenty-nine pupils present during the first day, and, amid the din of the carpenter's hammer and saw (for the apartments were yet incomplete,) the great work was commenced.

Mr. Page and his associates were all novices in the conduct of normal schools, and were obliged to "feel their way," as it were, amid many difficulties, and wholly unaided by the light of experience in the work of training teachers. The first six weeks were spent in a cursory review of the elementary branches of study. These subjects, treated as they were by the teachers, soon became dry and distasteful to those who had deemed themselves proficient in them long ago. Accordingly a change of programme was agreed upon, and all those

who, during the six weeks, had shown themselves qualified, were allowed to advance to higher studies. A class in algebra and physiology was accordingly formed; the former under the able mathematician, Perkins, and the latter under the leadership of Mr. Page himself. In this manner, the exercises of the first term of twelve weeks were conducted. Large accessions were constantly made to the number of the pupils, so that, before the end of the term, the school had increased to nearly one hundred pupils.

Thus far, the work had been preliminary and preparatory. None of those striking processes and results, so graphically described as characterizing the normal schools of Europe, had been realized. Mr. P's hopes were disappointed, and he regretted his choice. But, having unbounded confidence in Mr. Page, and trusting to time to correct all the errors, supply all the defects, and develop all the excellencies he had expected, he determined to hold fast and continue his normal life. The second term opened in May, 1855. With this term, the experimental school or school of practice was to be inaugurated, as one of the distinctive features of the normal school system for the training of teachers.

Having, by means of several long conversations with Mr. Page, upon the subject of teaching, as well as by intercourse with him in the capacity of a student, formed an intimate and favorable acquaintance with him, Mr. Phelps was designated by him as the person to organize this experimental school. He had thus the advantage of making upon the children the first impression, which proved to be a very pleasant and happy one. A strong attachment at once sprung up between the teacher and the pupils. This feature of the normal school establishment promised, in the outset, to be a highly successful one. Mr. P's term of service was fixed at two weeks. But before the expiration of this period, Mr. Page was taken seriously ill, and he was desired by the officers of the school to continue in charge of it until the principal's recovery. This detained him for six or eight weeks, and served to strengthen the ties between him and the children under his charge. At length, on the recovery of Mr. Page, he was allowed to return to his class, and the plan of rotating the teachers of this department was set in operation. But the change was injurious. The children no sooner became acquainted with a new teacher than he left them and a stranger was substituted. This led to difficulty and disorder. There was no uniformity either in the discipline or the instruction, and the experimental school became an object of dread to the pupil teachers, of aversion to the children, and of vexation and trouble to the principal, whose other duties allowed him but little opportunity to attend to its details.

A change of plan was accordingly determined upon, and it was proposed to place a permanent teacher or superintendent in charge of this department, subject to the advice and counsel of the principal of the normal school. It should be his duty to prescribe such regulations as might be necessary for the government of the school, to advise and direct the pupil-teachers during their term of practice, to notice and criticise their methods of teaching, to preserve order and uniformity in the school, and to train the pupil-teachers in the principles of their future calling. This plan was to go into effect at the commencement of the fall term of 1845. After mature deliberation, Mr. Phelps was chosen for this difficult, uninviting, and responsible position. He accepted it with reluctance, and entered upon its duties in October.

The plan succeeded. By it the school was redeemed from failure. Order was brought out of confusion, the children were happy, the pupil-teachers were again reassured, because pleasantly and profitably employed. Before the end of the term, so popular and successful was this department, that its capacity was doubled, and the tuition, which had been previously free, was fixed at twenty dollars per annum. So effective was the discipline and the instruction, as to exert a powerful influence upon the normal school, its methods, and its spirit. It served the purpose of a school of observation as well as practice, and many sound views of the nature and objects of education were here imbibed and carried forth into the schools of the state.

The constantly rotating teachers could not fail to produce constantly varying results. While one would secure the respect and affection of the children, and good order as a consequence, another would in a single day undo the good work of an entire week. These phenomena could not fail to provoke inquiry into their causes. The labors of different teachers were compared, their results were noted, and, after long observation, general principles were deduced and classified. These principles were at length produced in the form of lectures to the pupil-teachers, to their manifest interest and profit. Mr. Phelps occupied this position, trying but useful as it was, until the spring of 1852. Constant application to his work, with a view to master the difficulties which beset him, and to overcome all obstacles, produced at this time a serious derangement of his health. For one year he was a great sufferer from hemorrhage of the lungs and debility. He remained at his post, however, until even these physical weaknesses were overcome, and until the principles for the conduct of his "peculiar institution" were well established and embodied in its organization.

Finally, after having had some six hundred pupil-teachers pass in review before him, and after having labored faithfully to infuse into them his own life-giving spirit, he rested from these labors, and spent more than two years in travel and in the pursuits of business. During this time, his health became firmly established and his knowledge of men and things was greatly increased, by intercourse with the world.

Not long before the close of his connection with the experimental school at Albany, the degree of Master of Arts was conferred upon him by the trustees of Union College, at Schenectady.

In the summer of 1855, the first board of trustees of the New Jersey State Normal School, appointed under the legislative act of the preceding winter, elected Prof. Phelps, by a unanimous vote, principal of the new normal school, and called him at once to counsel with them in relation to their duties. Finding his qualifications adequate, they soon confidently committed the enterprise almost wholly to his management, imposing little or no restraint upon him except that which arose necessarily from the limited pecuniary resources at their disposal. Prof. Phelps adapted himself, with characteristic facility, to the new circumstances in which he was placed. He threw all his energies into the new enterprise, surmounted with skill the various difficulties with which the whole movement in New Jersey was at first embarrassed, and succeeded in a short time in opening the normal school under the happiest auspices, and with a very desirable degree of popular favor. It was not long before, under his management, the institution began to attract great attention, and visitors from the state and from abroad began to flock in to witness the arrangements, and the modes of discipline and instruction. It is remarkable that very few, even of those who were at first most prejudiced, ever visited the school without leaving it as friends. Indeed, hundreds of those who had originally been hostile to the movement, became the warmest friends and advocates of the school. When the new building was opened, and the requisite facilities were obtained for exhibiting the plan to the best advantage, it became a resort for multitudes; and, after the first public examination, the reputation of the principal and the school was established. Prof. Phelps has manifested a devotion to the interests of the school, and an ability in the whole and the detail of its management, which have already placed him in the front rank of the practical educators of our country, as one of the most efficient and intelligent leaders of the great educational movement in America.

XIII. AIMS OF THE STATE NORMAL SCHOOL OF NEW JERSEY.

BY PROF. DAVID COLE.

Being an address delivered at the closing exercises of the Farnum Preparatory School of New Jersey, July, 1887.

THE distinguishing feature of the system of education which we have already inaugurated in our Normal and Preparatory Schools, and which we purpose to carry into effect throughout all our State Schools, consists in the fact, that it is adapted to the nature, the condition, the circumstances, the wants, and the prospects of the children to be educated. It is not an aimless, confused, spiritless thing, but a plan thoroughly digested in all its parts, constructed with a wise reference to the accomplishment of certain ends, admitted by all to be of transcendent importance to the individual, the State, and the nation, both for the present and for future time. It is believed to be in strict accordance with the laws of man's being, and suited to the right unfolding of his physical, mental, and moral nature. He has a body: its health, its comforts, are to be regarded. He has an intellect: its craving nature is to be satisfied, its power is to be brought out, its unfolding is to be directed, its appetite is to be fed with that which is strengthening and healthful, its spirit of research is to be animated and inspired with an enthusiasm for what is useful and profitable. He has a "faculty of discerning beauty, order, congruity, proportion, symmetry, excellence." It belongs to education to train it, to encourage and to stimulate it. He has a moral nature, a moral sense, which it is the work of education to quicken. It is the great governor of every thought, word, and action. Surely that form of training which leaves out of view this important part of man's compound being, can be developing only a very dangerous element in society. That knowledge is power was never denied. But it must not be forgotten that it is power for evil as well as for good. The strongest intellect and the most finished scholarship are powers which, when under the control of bad hearts, can shake the family or the social circle, or the political fabric, to its centre with the most disastrous throes and convulsions. Too often, alas! has the history of the past attested—too constantly, alas! does the experience of the present attest—the destructive energy of trained and cultivated intellect, obedient to the impulses of selfishness and ungoverned passion. In the plan of education which we seek to describe and commend to the admiration of the reader, therefore, the training of the moral nature holds prominent place. We seek to develop a power and an energy of mind under the direction of pure hearts and principles. We seek to awaken in youth an admiration of what is high, rational, good, and useful. Our plans of instruction are such as invest the

pursuit of knowledge with pleasure and delight, the practice of morality and religion with the consciousness that it brings its own reward, self-respect and genuine disinterestedness with loveliness and attraction. Does any one fail to see that in the past, these best, these highest and noblest ends, were too generally overlooked in our systems of instruction? Education is, without doubt, a science founded upon immutable laws. As well might one claim to understand astronomy without a knowledge of the laws that regulate the movement of the heavenly bodies, as claim to understand the training of youth to accomplish the true ends of their being without even an inquiry into the immutable laws and unerring indications which ought to be followed in such training. And if this remark be true, what miserable dabsters, what fatal triflers, have we often allowed to play with the bodies, the minds, the hearts of our children! And what sordid considerations have many persons permitted to blind their eyes to the highest interests of their offspring! Money in comparison with these interests is as the dust in the balance. Leave children with well-cultivated hearts and minds, and you leave them with a legacy superior in value to all the wealth of the world. Leave them the money which false notions have led you to hoard up instead of bestowing upon their education, and if their moral and mental culture has been neglected, it will certainly make them no happier, perhaps it will make them and others wretched, perhaps it will be the very means of their ruin. Illustrations of the truth of this remark are abundant, and within the observation of all. If then we are coming to an understanding of this matter, happy will it be for us if we at once determine to rectify our mistakes, and to avail ourselves on behalf of our children of the precious opportunities which, in the Providence of God, it is now ours to enjoy.

The general remarks which we have thus made will be better understood, if we exhibit, as we now propose to do, some of the more prominent and striking characteristics of our system in detail. A casual observer will not fail to see and be struck with all the features that we shall mention, if he should visit our schools. What we shall say will be drawn from an observation of our Normal and Preparatory Schools. We have made ourselves familiar with their workings and results, and are satisfied that if the people stand by these schools and support them as their almost unparalleled excellence deserves, they are capable of working, in a short time, a mighty change in the district schools of the State. They are centres of light, to be radiated in every direction. At two important points—Lambertville in Hunterdon, and Somerville in Somerset county—the trained teachers from the Normal Schools have been set at work, and are putting into practice the lessons which they learned at the Normal School with great success. Their “profiting is apparent to all.” They were old teachers, who had laid aside for a time the authority of the school-room to avail themselves of the advantages of the Normal School. They do not look upon the time thus employed as unprofitably spent. Their training has inspired them with

a new spirit, and with clear, systematic, orderly, and well-defined conceptions of the great work to which they have devoted themselves. The people of these villages look upon them with admiration, and would not be induced to part with them on any consideration. Princeton, too, is about to furnish a fine new building, and to engage the services of a corps of these well-trained teachers. They have excited the respect of the people everywhere. Nearly fifty of them are already in the field, and they are commending the training which they have enjoyed by zealous and intelligent labor both in and out of the school-room. They are as a leaven by which we have a right to expect that the whole State will be speedily leavened.

If one looks into our system in its details, with a view to understand it thoroughly, the edifices, furniture, grounds, &c., will first of all attract his attention. They claim to be model school buildings with model appliances and surroundings, and we have yet to hear the first person say that they are not so. The buildings are spacious, constructed with a view to the physical comfort of teachers and students. They are well lighted, comfortably warmed, and thoroughly ventilated. They are so arranged as to admit of and to secure comfortable and orderly ingress and egress. They are supplied with cloak and hat and umbrella rooms, in which each pupil has his hook assigned, and in which at any time during school hours, every article of dress will be found in its appropriate place. The buildings are properly supplied with furniture which is itself an ornament, and contributes to the attractions of the school-rooms.

There is no reason in fact why this should not be so in all school buildings. The difference in cost between clumsy and neat desks is less than many think it is. The recitation-rooms, the library and reception apartments, the apparatus-room and laboratory, are all just what they should be, and form so pleasant a place of resort that one feels a delight in visiting them. Of course, the small schools in the rural districts do not require such large buildings, but they may be made equally delightful as places of resort, and they may have all these features about them as far as their circumstances require. And if the people are expected to visit them, they must be made what they ought to be in these respects. Many a parent has pitilessly sent his child for months and years to school in a building in which no small consideration would have tempted him to incarcerate himself for a day. No wonder that nobody loves schools; no wonder that nobody thinks any thing of education. If those things were schools, if that heartless and unmeaning process was education, then we are as much opposed to schools and education as anybody. If the acquisition of education necessarily involves the dispensing with pure air, or the cramping of young limbs, for many of those years of life which are of the greatest importance in the unfolding of the physical being, or the constant obtrusion of unsightly and disgusting objects before the eyes for many of those years during which only we can hope for the high culture of the taste, then away

with school education! Down with the ghastly spectre! Give us the open air in preference! Give us, far enough above this, the education, defective though it will be, which every child will be sure to acquire if permitted to rove freely through the pure fields, and daily read the lessons of the farm, the brook, the tree, the shrub, the flower, the valley, and the hill-top, the song of the birds, the glories of the heavens, or to commune with the voices of his own mysterious nature, and to study unguided the workings of his own inner life. No, these comfortable and beautiful and orderly arrangements of our buildings, together with the taste displayed in the laying out of the surrounding grounds, teach eloquently and constantly to the students and also to the visitors a great and most important lesson of themselves. They do more than all oral instruction to cultivate a love of neatness, symmetry, beauty. Illustration is the great thing in teaching. To introduce the study of æsthetics into a school whose appointments and surroundings are in direct contradiction to every emotion of love for the beautiful, is to introduce a miserable farce. One who habitually sees beauty, neatness, order about him will never witness or know of their opposites without pain. Men and even boys hesitate to enter neat parlors with mudded boots or shoes, and very few are so wanting in a sense of propriety as to expectorate upon a carpeted floor, or even to throw whittlings or papers upon neatly arranged and park-like walks. If we could keep our boys and girls constantly in such places, they would be put under habitual self-constraint. If on every entrance into their school-houses, children should be expected to attend to the cleanliness of their feet by paying proper respect to mats or rugs, or by exchanging the shoe for the clean, the light, and noiseless slipper, and to make an orderly disposition of the hat, the outside wrapper, and the umbrella, the moral effect would be incalculable. As it has been, those whose habits in these respects are carefully guarded at home have seen the teachings of the family circle so utterly contradicted at school, that they have come speedily to the practice of regarding them as so many effeminacies, so many womanly restraints, from which they have been anxious to be delivered as soon as possible.

Every thing in our Normal and Preparatory Schools is adapted to foster correct taste, and a love for the neat, the orderly, and the beautiful. And in these respects their value is beyond all price. No sum that can be named would express their worth, considered in the æsthetic aspect alone. The conveniences too with which these establishments are so liberally supplied deserve notice, and among them, none is more prominent than the wall slates, used in place of blackboards. We do not know that the remark will be credited by all, but teachers know that these wall slates, by the beauty and clearness with which they present the operations of the student, serve greatly to enhance the interest which he feels in what he has done or is doing. We do really believe that they are as great an advance upon the common boards, as the common boards were upon no boards at all. All these things strike the observer immediately upon

entrance into the building, together with the care and pains taken to keep the furniture, floors, &c., clean, neat, and free from defacements. An experienced teacher from abroad visited the Normal School building with us a few days ago, since the session closed. We conducted him through the house, exhibited to him every apartment, and found every nook and corner, as it always is, in perfect order. We expressed a regret that the school was not in session, and said that we should very much like him to witness the classes at work. Said he, "I can easily judge that the school must be one of great excellence merely from what I see of the condition of the furniture. It could not be in such beautiful preservation after a year and a half of use, without an excellent state of feeling and an habitual care on the part of all concerned." This would be the verdict of any competent judge. Water for drinking and washing purposes is conducted into the cloak-rooms; and mirrors, hair-brushes, combs, napkins, &c., are all at hand to remind the student that cleanliness, and order, and personal neatness are the laws of the place. So much for that part of our subject which relates to the buildings, the furniture, and grounds. We pass now to consider the working of the school itself.

One of the prominent characteristics is the perfect classification of the students. The classes are fixed, and the studies of each class are distinctly defined. It is quite possible to do this in a school where all pupils have the same end in view, and it ought to be done to as great an extent as it can be in every school, as it greatly facilitates and expedites the work to be accomplished. One of the greatest obstacles to this in our district schools is the great variety of text-books, and the unwillingness of parents to be at the expense of changing them. Nor is this unwillingness very surprising, since the teachers are so frequently changed, and every new man is for ousting the text-book of his predecessor. Here, however, this obstacle does not exist, all the books being furnished by the institution itself. The pupil is at no expense for books, unless he injures those lent him; in which case, of course, he makes good the damage. This teaches care in the use of books, another lesson of vast importance to youth. In truth, there was nothing under the old system, or rather want of system, which in any way taught the child lessons of care. Here every step brings with it a sense of responsibility, and teaches thoughtfulness. This plan of furnishing the books ought to prevail in all our schools, and we have no doubt that it will be so when the influence of our Normal Institutions shall be more widely felt throughout the State. Another obstacle in the way of perfect classification in the district schools of the State, has been the false views of parents in regard to the true basis of such classification. Age is not this basis. Intellectual attainment and mental power alone are to be taken into consideration. We have often seen boys and girls who had nearly attained to manhood and womanhood without an acquaintance with the simplest elements of knowledge, who could scarcely read intelligibly, or write legibly, or perform the simplest operations of arithmetic, much less explain them

when performed ;—and yet we have seen these very persons too conceited and too proud to be classified with young children in the school. Parents sympathized, and the teacher's labor was greatly increased and his school thrown into needless confusion in consequence. Now the true doctrine is as we exemplify it in our Model School, or School of Practice, and in this Preparatory Institution, that those who are too self-conceited to be placed where their attainments indicate that they ought to be placed, must be humbled, or else they must altogether abandon the idea of going to school. Is a child, who admits by going to school that his teacher knows more than he knows himself, is he after all to give direction to his own course of study? The first point is for every child to discover the limited extent of his knowledge, or in other words, to be effectually humbled under a sense of his own ignorance, and to a spirit of docile, not blind, but still docile submission to the will of his teacher. Another great obstacle to the perfect classification of the children in our district schools, has been their irregular attendance. As the schools have been, we do not care much about it, but if ever they become what they ought to be, the loss of a day will be a real loss. Where there is little or nothing to gain, there can be little or nothing to lose, but if schools are good for any thing, the loss of a day or of a few days is irreparable. When children are absent from a good school one day, they in most instances lose more than they can gain in two of attendance. None of these obstacles exist in our Model School. As we have said, the books are furnished, and regular attendance is imperatively exacted of every pupil who is in health. And as for pupils themselves deciding what classes they are to join, or what studies to pursue, such a thing is never thought of for a moment. Every applicant for admission is subjected to the most rigid examination as a test of attainment. The examination is conducted by means of printed questions. The answers are to be given in writing, sufficient time is allowed for the work, and there is nothing to terrify. The written answers, of course, furnish an exhibit of the penmanship, the orthography, the punctuation, the taste or want of taste, as well as the degree of acquaintance with the subject of examination, whether that subject be Geography, Grammar, Arithmetic, or any other of the numerous subjects presented. These papers would satisfy any one of the utter deficiency in respect of elementary education that prevails in our schools. Let the skeptic go and look at them, as he can do if he wishes. What particular individual wrote a particular paper will not, of course, be told, but the papers ought to be, and I suspect are preserved, as the loudest witnesses to the necessity of improvement. The applicant is then placed just where he ought to be, just where his attainments entitle him to be placed, irrespective of his age, or any other adventitious distinction. This is a great point gained. When the school is thus classified, the plan of instruction, of course, constitutes an important feature. And, first—

The subjects presented are just those which are adapted to the mind of the child. Nothing is ever placed before him which is in advance of his

comprehension or of his power to comprehend. Great importance is attached to solid elementary training. It is fully understood that without this, the whole future course must be a farce, the whole superstructure must be a miserable failure. There is no catering to that destructive ambition on the part of children or parents which insists on rapidity at the expense of thoroughness. And here we ask any reasonable man to say what advantage it can be to a child to hurry him on to the complicated operations of Arithmetic, or even to the mysteries of Algebra and Mathematics, before he understands simple Addition, Subtraction, Multiplication, and Division. And yet we know it has been done in thousands of instances. We have seen boys poring over the musty pages of a Treatise on Trigonometry, who could not tell the difference between $\frac{1}{2}$ and $\frac{1}{3}$, or whether either one of these sums is more or less than a unit. Yes, and we have seen teachers brainless enough to call such children stupid, and to inflict punishment upon them, because they could not attain to a grasp of these sky-high subjects without the ladder of elementary training to ascend by. If the intellect of children is to be measured by such standards, every child is a stupid dolt, and we are all in the same category. But it is a ruinous, an inexcusable error. It is, of course, of importance to make progress, but to attempt to mount to high attainments in knowledge without taking the necessary gradations from the elements upwards is absolutely absurd—it is so plainly impossible, that we always did wonder that any one tried it himself, or tried to make others do it. This fault is not observable in our Model Schools. If any one is found deficient in the elements of knowledge, he must go down and take his elementary course, no matter how much stray information he may have picked up with respect to higher subjects. It is of no avail to parley about the matter. No whim of parent or child will induce us to attempt impossibilities. And the pupil must stay upon the elements till he understands them—no longer. The object is not to keep him in the school for a great length of time, but simply and solely to do the work rightly and well. Now we speak warmly and decidedly upon this point, and we believe we shall be sustained by thinking men. If a boy never can learn to recognize his letters, or appreciate the powers of them, what possible advantage can it be to put him at attempts to read? The effort should clearly be to teach him the letters, and if his whole life should pass away in the attempt to learn the characters of the alphabet, provided the effort to teach him be conducted industriously and according to the best understood modes of teaching, we shall have to be content, for we cannot go a step in the attempt to read without an ability to recognize the letters. Now reading is a most important matter in elementary training. We think it safe to observe that half the difficulties which children have in their studies at school, arise out of their inability to read understandingly. We do not intend to say that no other studies should be attempted before the art of reading be thoroughly mastered, because it is a work of a lifetime to learn to read with an appreciation of what we read,

and without this, there can be no good reading. Then, too, the understanding of words is acquired by the discovery of their relations to the things and the subjects which are met with and evolved in other departments of study. But we can never expect children to receive or become interested in instruction, given in words to which they do not attach a well-defined meaning; nor will they ever be profited to any great extent beyond the mere practice in the art of reading by any text-book study, as long as it is necessary for them to make out the words of the author by dint of hard spelling, or as long as they do not understand the art of fluently dividing syllables with correctness. We look upon this matter of reading, or learning to read, as one of transcendent importance. The great point in reading, is either to take the sense of what is read easily and pleasantly for one's self, or to give it with pleasure to others. There is no child or adult who is not under a necessity of doing both, and that frequently. In reading for one's self or for another, the sense of that which is read must be readily taken; but in reading for others, even more is necessary. The faculty of distinct enunciation, correct accentuation and emphasis, must be possessed, or the true sense of a passage cannot be given. It must be felt by the reader, or he cannot give it to the hearer. We must be excused for saying that we have had our patience more tried by indifferent reading than by any other thing that relates to scholarship. It is the very reason, no doubt, why there are so many who have no taste for reading, because they cannot read. And it is also the very reason why so many public men in the professions cannot procure listeners, because they cannot read in such a manner as to interest them. Great pains are taken to teach our children in the Model Schools how to read, and if they have not gone too far in the false notion that reading is of small importance, or that they read quite well enough already, the plan adopted will in most cases prove successful. Good reading almost necessarily implies tolerably correct spelling. If boys say "Noin-a-tive" in reading, are they not probably under the impression that the word is spelled N-o-m-a-t-i-v-e? or if they say Abbeltive, would they not probably write A-b-b-e-l-t-i-v-e? and so in many other cases. To remedy such fatal mistakes and oversights in elementary training is our determination. Hence we spend much time upon these things which in many schools is unwisely spent upon more advanced subjects; for we proceed upon the belief that laying foundations solidly is the great business of childhood and of school instruction. It is by no means the work of the school-days to exhaust the subjects of human thought. It is rather to furnish the implements with which the individual, in future years, is to delve into inexhaustible mines with successful energy and profitable toil. We propose to turn out students, not scholars. Schools do not make scholars, in the highest sense of the word, but they give to men the power to make themselves scholars. They incite love for study, and study makes scholarship. This, at any rate, is our understanding of the matter. Therefore what a child knows when he leaves school is not of so much importance as how

he knows it; what he has studied is of less moment than how he has studied. So we are careful not only as to the subjects presented to the children, but—

Secondly, we are careful as to the manner of presenting them. Our idea is to secure growth to mind. Now it is essential not only to offer nourishment to the mind, but to see that the mind partakes of the nourishment offered. Mind is strengthened by action and self-reliance. No method of teaching which relieves the children from the labor of thought can be a successful one. That must be the true method which brings all the mental powers into harmonious, vigorous, and powerful action. The "pouring in" method, as it has been called, or the method in which the teacher does the talking and the pupils the listening, in addition to many other minor disadvantages, tends to put the mind to sleep, to enervate its strength, and, in fact, to destroy even what life it may have had. And even the "drawing out" method, by the putting of leading questions, so artfully constructed as to give clue to the answers, is not a whit better. But the true "drawing out," that which we conceive to be implied in the word "education" itself, in its original force, is precisely that which we adopt. It is that of sending out our pupils to roam, as it were, over the fields of knowledge, and to bring in for display the riches which they may have gathered in their excursion. We assign to them duties adapted to their strength, and we expect those duties to be performed. We assign to them subjects for research, making ourselves satisfied that they are competent to investigate them, and giving them directions as to the places where, and the mode in which, the information required is to be found, and we expect them to come back and give an intelligent, succinct account of what they have done, and what they have discovered. That we do not over-estimate their ability to do it is proved by the fact, that the plan is in successful operation, that intelligent men and women witness it daily, and with admiration. We ask no leading questions. We leave the pupil to a dependence on himself. He learns to search, to think, to give expression to thought. He learns to think for himself, to think audibly and clearly without reference to the presence of others. We do not admit that any thing is known until it can be described in language. To develop the ability of deep and independent thinking is our great aim, and we do succeed, and shall succeed in making strong thinkers, men and women who will not be content to let others do their thinking for them. We insist upon clear processes of thought, to be judged by lucid expression. The wall slates are called into requisition constantly. Expression, illustration, demonstration are required. We endeavor to combine, as far as possible, theory and practice, to show the practical use and application of every subject taught, and thus to infuse an interest which can never attach to theory alone. The result is, that our students generally manifest a lively pleasure in the duties of the school-room. They do not give an observer the impression that they are mere automata, impelled or worked at the will of others, but rather that

they are self-regulated, conscious of innate strength, and moving as if actuated by some great and well-defined purpose. Their course has been such as entirely to free them from spiritless dependence upon their teachers, or upon their text-books. It will be noticed that they have no blind reverence for a single text-book, but that they examine subjects in all the different views presented by the different authors at hand, and are intelligently eclectic, and often entirely original in their own views. The business of the teacher is to guide them, not to do their work for them. The results of this plan are, that we have a hive of busy, cheerful workers. Each one feels that his mind is growing. Time never seems to hang heavily on his hands. Every pupil seems to think the school-room a pleasant place, and study a pleasant and profitable employment. This appears to be quite the reverse of the old order of things, in which many of the pupils sought by every possible expedient to evade the confinement and authority of the school-room. Boys and girls often learned their first lessons in prevarication by the suggestions of the school-room. A large portion of school-time was spent by them in idleness, and the rest in an endeavor to grasp subjects far in advance of their powers, or in learning theory without practice. No adult would bear such a tedious ordeal, and it is wrong to expect children to bear it without restlessness. In endeavoring to throw off such a yoke, they only obey an impulse of their gladsome, joyous, exuberant natures. The sins of parents against their children in connection with their education are almost unpardonable, because if they could not know any better way, they might at least know that a way that is unnatural is wrong.

It was beautifully said in substance in a recent address, that God never intended pain to be connected with the acquisition of knowledge, but only with moral delinquency. This idea ought always to be regarded in the education of children, and we claim to regard it in our Model Schools. We claim to have arranged our whole system in accordance with this simple, this beautiful, this natural idea, and we feel assured that the very first thing that will strike any observer of these schools is, that this idea is carried through all their operations. All faces are bright and cheerful. No countenance is darkened or deformed with sullenness or pouting. The school looks more like a happy, animated home-circle, where all is affection and confidence and ease, than a school, where duties, distasteful to the children, are rigorously exacted. And it may be asked, "How is the discipline managed?" The true answer is, that there is far less occasion under this system than under the old one, for that which we usually understand by discipline, *i. e.*, punishment. Each pupil has so much to do, and it is so strictly within his ability to do it, and he finds so much real pleasure in doing it, that there is no time and scarcely ever any inclination to be refractory. The pupils generally seem to have found the true secret of being happy, *i. e.*, by doing right for its own sake. Yet it must not be supposed that we are entirely free from a necessity of exercising discipline. In general, it may be said that the order of the schools is maintained—

First. By vigilance. Few things in the school-room pass unnoticed by the teachers. They are wide awake, and cultivate a habit of seeing every thing that transpires. This activity on the part of a teacher is one of his first qualifications. The children of a school must never get the impression that their own activity exceeds that of the teacher. It is not so here.

Secondly. By habitual self-possession. Never does a teacher more effectually impair his government than when he suffers passion to gain the control over his judgment. These teachers never permit themselves to be thrown off their guard in this respect, but exhibit unvarying self-control under the most trying occurrences.

Thirdly. By steady administration. The laws made are natural, and can be carried out, and the great secret of the order is, that they are, and the children know that they will be, enforced. No rule is laid down without reflection, and no rule, when enacted, ever becomes a dead letter without the best of reasons. Disobedience, obstinacy, rebellion are as sure to be met as the school hours are sure to come. They cannot possibly escape; and who does not know, either from observation or experience, that constant rebellion is poor business when it never succeeds?

The penalties are various. They consist—

1. In the deprivation of an expected pleasure. And here there is in this system what would have been considered an anomaly heretofore. A child may be made to suffer deeply by being deprived of what he here considers the *privilege* of reciting, or of undertaking for a time a new branch of study. The interest of the pupil is here so completely enlisted in his subjects of study, and his mind is so animated with a desire for progress, that he suffers positive pain when not permitted to proceed. This is truly one of the greatest triumphs, and one of the highest commendations of our schools, that we are making the pursuit of knowledge one of the highest of pleasures. It is so contrary to the experience of the past, that we should scarcely find fault with any one for doubting the truth of what we say. It is truth, however, and we challenge the most thorough investigation of the facts for verification.

2. Another penalty is confinement during extra hours. And here too there is a feature which merits notice. No child is held in confinement immediately after school. There is but one school session of five hours, not two, of three or two and a half each, as formerly. The hours of school are from 9 to 2 in the winter, and from 8 to 1 in the summer, with two out-of-door recesses during this time. Whether the one or the two sessions per diem arrangement is the better, is a vexed question. To discuss it here is foreign to our object. For ourselves, we must say, that the arguments in support of the one session per day seem far stronger than those against it. The confinement of the children and teachers for such a length of time is, of course, the strongest objection. We heartily sympathize with it. We sicken at the thought of imposing restraint upon the joyous little children, of shackling and fettering their gladsome spirits for so great a length of

time as our systems require, and we believe the day not far distant when different ideas will prevail upon this subject, and children will be less confined than they now are,—confined for a shorter time, but with far greater effect and more valuable results. At any rate, it will be seen that the afternoon is not taken into the school session in our plan. We use it for another purpose. At the close of the regular session, the children are all sent to their homes for their meals and refreshment, irrespective of all other considerations. We have no idea of killing children in order to make them moral or industrious. Allowing a reasonable time for refreshment, delinquents return to the school-room, and are there required to make up for the deficiencies of the morning. The time is ample. The pupil does not apply himself to his work, thoroughly jaded, but entirely rested, and there, in deliberative leisure, he finishes all that he had lazily neglected to do at the proper time, or atones for violation of rules respecting conduct. This time is also employed by the teacher in explaining difficulties and elucidating subjects of instruction to the dull and backward pupils, who are regarded in these schools with peculiar tenderness, and are the subjects of special and untiring effort. The whole system is such as to encourage and uplift, not to depress and dishearten. No passionate expressions of contempt for any scholar are ever heard by the school from the lips of the teacher. No boy or girl is ever called "stupid," "senseless," "a dunce," "a blockhead," "a small potato," or any other of those numerous appellatives which every one has heard in his lifetime, from teachers who had not learned the importance of self-control. Every child feels itself respected. He is addressed as a human being. His progress keeps pace, as it ought and must, with his capacity. He is always ready for every new step, when the necessity arises for taking it, and consequently, if he really is stupid, he is not allowed to discover his own stupidity, and his courage is constantly rising. It certainly ought to be known too, in this connection, that many children who appear at first stupid, if they are properly stimulated to the energetic use of their powers, often turn out to be in the end the brightest men and women. There can be no more reprehensible practice than that of discouraging children who appear dull by reproaching them with opprobrious epithets. Many a child, who had sterling qualities in him, must have come in this way really to credit the commonly received opinion of his own stupidity, and to discontinue exertion altogether, and thus in the end, through the folly of his teacher's course, to verify that teacher's oft-repeated predictions. But we must proceed to say that—

The order of our schools is greatly promoted by the example of the teachers. Every teacher is in the right place at the right time. He is himself, as far as possible, a realization of the great ideal of perfection in the matter of order. He is always at school in time. His own desks, books, and papers are always in order, and whatever duty devolves upon him, is always faithfully discharged. He is neat in his personal appearance, careful, but natural, in his conversation, regular and systematic in his

habits, punctual and prompt in fulfilling his appointments, regards scrupulously all his promises, improves his time with exemplary assiduity, and shows in every act and by every word that he is conscientious in what he says and does, and that he may safely be imitated. All this, however, is quiet and natural. He never asks the attention of his students to himself as a model for their imitation, but commends himself by being that model. There is inseparable from his very presence, that "unconscious tuition" which has been so beautifully described by one of our most gifted brethren.* It has a power, though it seems to know it not. That power is felt, though none can say why. It is not an unpleasant, but rather a delightful constraint, the just respect that children as well as adults pay to goodness, self-control, fidelity, conscientiousness. All have felt this power, but none can say how. But again we must say that—

The order of these schools is maintained by direct appeals to high motives. The students are taught that by correct courses of conduct and faithful attention to duty, they will really promote their own happiness and well-being. True views of life are imparted to them.

1st. They will have a social position to occupy. They must now set forth in such a manner that they will ever maintain the respect of their fellow-men. Hence they must cultivate the qualities essential to true manliness. They must in their walk and conversation be orderly, polite, gentle, considerate of the comfort of others. They must hold the profane, and the obscene, and the false in unutterable contempt. They must be candid, sincere, truthful. They must never persist in a known wrong for a moment, though the acknowledgment of it may involve brief mortification. No human being, in fact, can ever be a man in the true moral sense of the term, unless he is above the feeling of mortification in acknowledging an error, which he has discovered to be such, though he had previously supposed it to be otherwise. The highest and brightest adornment of noblest manhood is truth. The just end of all study and philosophical investigation is truth. Truthful models, truthful ideas, truthful hopes, and truthful prospects are therefore constantly presented to our students, that their admiration may be drawn powerfully to that which is true, and just, and lovely, and of good report.

2dly. They will have a civic position to fill. Truth here too, as in social life, is the highest ornament of the man. Oh, how much falsity, hollownees, shallow pretence, and accursed duplicity is found in high places! Is it not time to draw the attention of our children to the corruption and the mendacity, the humbuggery, the offensive forwardness, and the transparent selfishness of ambitious men, who wallow in the turbid shallows of the political pool in search of the pearls of office, honor, place, and emolument, who seek to wheedle and cajole the dear people into such an appreciation of their own merits, as will insure them the object they covet? This gained, what care they for the dear people? We look to education, to

* Prof. F. D. Huntington in the *American Journal of Education*, vol. 1. p. 141-168.

right education, moral education, to adorn our rising sovereigns with the lustrous ornament of truth, and we seek in our schools to prepare our students properly and well for the social circle not only, but also for the relations of civil and political life.

We scruple not to say here, too, that our pupils are young immortals, and we realize our duty to them in this important aspect. We open our schools with the reading of a passage of Scripture without note or comment, and we invoke the blessing of God at the commencement of each day upon the duties and labors of the day before us. It is done solemnly and seriously, and not as an unmeaning service. Nor do we hesitate to use the general precepts of religion in moral instruction; but not by a word or act, or even by implication, is one attempt made to inveigle or decoy any pupil into the meshes of any denominational net, or to carry the citadel of any heart for an external form, or a sectarian creed. We believe that education can never be complete without the culture of the heart. We know of no truth like Bible truth, no power like Bible power, for this purpose. We avoid with the most scrupulous care the propagation of any sectarian view, but if we wish a golden rule, "All things whatsoever ye would that men should do unto you, do ye even so to them," we hesitate not to adopt it because it is in the Bible, or because the sublime precept first fell from the lips of the Redeemer of man. Nor do we hesitate to go to the Bible for those fundamental truths that lie at the foundation of all correct philosophy, and which can be derived from no other source with equal clearness, some of them from no other source at all, as the creation of the world, the Bible view of which alone can set at rest all questions on the subject of cosmogony. It is general truth, simple moral truth, as it affects our relations with and to our fellow-men, and simple religious truth, as it affects our relations to God, not controversial or controverted points, that we feel at perfect liberty to use and inculcate, because they are in consistency with the views of all sects. It is what may lead our pupils, when they grow up, to be thoughtful and examine for themselves their duties to God and man in their broadest sense. Let us take care that in our horror of sectarianism we do not lose sight of the fact admitted by all sects, that the God of the Bible is the God of our nation, acknowledged in its foundation, acknowledged hitherto in its progress and its rising glory. Let us not, from a dread of sectarianism, induce Him to spread his sheltering wing, and take his flight forever from our public institutions. Disastrous indeed, fatally disastrous, would such withdrawal be. We have no greater evil as a nation to fear.

It is believed that we have adopted the right plan in these institutions, and that in a few short years the happy results of what we have done will appear in a renovation of our school system, in the elevation of our schools throughout the State to a normal condition, in the securing of correct, salutary, model methods of instruction and discipline.

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